The Annual Address
IN
MEDICINE IN THE UNITED STATES, AND ITS RELATIONS TO CO-OPERATIVE INVESTIGATION.

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BY JOHN S. BILLINGS, M.D., LL.D. EDIN.,
SURGEON, U.S.A.

MR. PRESIDENT AND GENTLEMEN,—You all know that the representative of the American medical profession first selected by your executive committee to deliver the address in medicine to-day was the late Dr. Austin Flint, sen., of New York, whose death last March is therefore a great and direct loss to you as well as to America. Every English physician knows Dr. Flint by reputation and through his writings, but only those few of you who were so fortunate as to know him personally can fully appreciate the magnitude of the loss which the medical profession has sustained in his death. This is not the time and place to attempt to pronounce a fitting eulogium upon him and his work, and I shall therefore only say that my deep personal sorrow for his removal is mingled with sympathy for the members of this Association, who have been thus deprived of the pleasure of hearing him state in person some of the results of his long and wide experience. The loss is not a total one, it is true, since he had fortunately completed his address on "The Medicine of the Future," which has been published, and has no doubt been read by all of you; but in this case the printed page is by no means a satisfactory substitute for the spoken word.

In accepting the request with which I have been honoured by your Council, that I should attempt to take his vacant place on this occasion, it is with a full understanding of my inability to fill it that I stand before you. The request came at a time when I was hard pressed by official duties, and had neither leisure nor opportunity to undertake any special research; hence, to avoid violating one of my favourite Scotch maxims—viz., "That which you do not know, tell not to anyone," it was necessary to select some subject to which I had already given consideration, and which at the same time would probably be of interest to English physicians. Reflection on these restrictions soon brought the field of selection into narrow limits, almost into "a small intercept of space of one dimension," as a mathematician would say. What is the significance of this invitation extended for the first time to a physician of another country, and that country the United States, to come to this annual gathering of the medical men of Great Britain and give the address in medicine? Does it not mean recognition of the unity of medicine, of the utility of co-operation, of the fact that we have common interests, and that the time has come when it is desirable to hear from the outlying younger branch of the family with a view to mutual pleasure and profit in the future? So it seems to me; and I propose, therefore, to call your attention briefly to some points relating to the present condition and future prospects of medicine in the United States, and to the direction in which you may reasonably hope and expect from that country in the future the most useful co-operation in the improvement of medical science and art. I believe that these must be matters of interest to you, and that I can perhaps make clear certain peculiarities which do not seem to be as generally understood on this side of the Atlantic as it is desirable that they should be to ensure sound judgment upon some of the results observed.

In the first place, permit me to call your attention to the fact that it is hardly possible to make any statements with regard to medicine in, or the medical profession of, the United States as a whole which shall be definite and at the same time distinctive—that is, which will not apply almost equally well to medicine and the medical profession in other countries. This is due to the fact that there are great differences in the organisation of the profession in different parts of America, so that what is true of one State would not be true of another; what is required as to fitness or qualification to practise in one place is not required in another; and the country covers so many parallels of latitude and meridians of longitude, making the conditions of life so diverse, and producing such differences in the prevailing diseases, that a man who is fairly qualified to practise in one section may be poorly fitted to treat the endemic diseases of another. As in painting a picture, it is best to locate and define the shadows first, and deal with the lights afterwards, let us begin by considering some of the things that American physicians complain about—in other words, some of their supposed grievances. One of these is that the profession is overcrowded; that there are too many doctors, both *in esse* and *in posse*, and that this is due to too low a standard of education, and to the want of legal restrictions as to the qualifications which shall give a man the right to practise. The feelings of some of our physicians on this subject are in full accord with those of the good old New England deacon who told the village scapegrace seeking admission, that "he thought the church was about full."

Now, what are the number and distribution of medical men in America? Statistics gathered in 1883[1] showed that in the United States and Canada there were 90,410 persons calling themselves physicians, being in the proportion of 1 to every 600 of population. In Canada alone there were 3487 physicians, or 1 to 1112 of population. If we take the figures of our last census, 1880, the proportion of physicians reported is 1 to 589 of population, or 17 per 10,000. In England and Wales, by the census of 1881, the proportion of physicians is only 5·8 per 10,000, but these figures are not properly comparable with those of the United States, because they do not include unregistered persons. If the same classes were included that are counted in the United States report, I presume that the proportion would be about 9 per 10,000, or a little more than half that in the United States. The proportion to the population of those who call themselves physicians varies greatly in different localities; thus, in Colorado there are 29·3, in Indiana 25·2, in Oregon 24·3, and in Arkansas 23·5 per 10,000; while in New Mexico there are only 6·6, in South Carolina 9·2, and in North Carolina 9·7 per 10,000. [A map of the United States was here shown, on which the proportion of persons calling themselves physicians to the population in the several States was indicated by different shades of colour.]

It is not easy to give satisfactory reasons for these differences; we can only say that they do not depend to any great extent upon local legislation. The proportion of physicians is generally lowest in the southern States lying east of the Mississippi, and highest in those regions where immigration has recently been active. If we compare, by localities, the proportion of physicians to the population with that of clergymen and lawyers, we find some curious differences. It seems that the lawyers in the United States number 12·7, while in England and Wales they are 6·6 per 10,000; but that, on the other hand, the clergymen are 14·6 in England and 12·8 in the United States per 10,000 of population. In many instances it seems that where the lawyers are most numerous the supply of clergymen is smallest. I believe that a fair proportion of physicians to population is about 1 per 1000, which is not far from the actual proportion in England; while the true proportion of practising physicians in the United States is about 1 in 750. We must admit, then, that there is, at all events, no scarcity of physicians in the United States; and, as we have over eighty medical schools at work, besides a fair proportion of medical immigrants, there is no immediate danger of any interruption to the supply.

Let us now consider the second head of the complaint—viz., that the standard of education is too low. There is ground for this, considered with reference to some localities, but not for others. I said a moment ago that a man might be fairly qualified for practice in one part of the country, and yet find himself at a loss in another. This needs a little explanation, which I can, perhaps, give most easily in connexion with a map of the United States [the lecturer here exhibited a chart]. This map, which was prepared for a

[1] Illinois State Board of Health Report, 1884.

very different purpose, indicates by different shades of colour the relative proportion of deaths reported as due to malarial disease to the total number of deaths in different parts of the country for the census-year 1879-80. You will note how comparatively light the tint is in the north and north-east, and how dark the shades become in the south and in the valley of the Mississippi, thus indicating the great differences which exist as to the prevalence and deadly effects of the malarial poison in different sections of the country. It is in some of these low bottom lands and swampy districts that we meet with cases of congestive chills and of malarial hæmaturia—cases in which the patient has been described as being "a mere appendage to a huge malarial entity, an incident of a miasmatic cataclysm." Furthermore, this strip of land bordering on the Gulf Coast is in the yellow fever zone, and has heretofore been repeatedly desolated by this pestilence.

As compared with the north and east, much of this malarious region is a thinly settled country, an almost purely agricultural country, and not a rich one. I need hardly tell you that the physician who has received his chief clinical instruction in the office of his preceptor in Vermont or New Hampshire, supplemented by distant glimpses of a few cases in hospital in Boston or New York, will find himself at a loss at first in dealing with the emergencies of daily practice in Arkansas and Mississippi. He will be subjected to influences which at times are dangerous to one who is not acclimated, and which tend to produce depression of spirits, want of energy, and bad health. He will not have free and constant access to scientific companionship, nor be stimulated by the influence of learned societies, and he cannot avail himself of the ordinary sources of amusement, education, and rest, such as art galleries, the drama, libraries, and museums, &c., which are found in the large cities. Moreover, the pecuniary reward the practitioner in many of these places can reasonably hope for is comparatively small.

Taking all these things into consideration, it is clear that if a man, after spending from six to eight years, and from £1000 to £2000 in acquiring such a general and professional education as it is now considered that a skilled physician should possess, then settles in such a region with the prospect of an average income of from £150 to £200 per year, it is not from pecuniary motives alone. There are such men in such places, men who are not only highly educated and skilled practitioners, but who are also original investigators and thinkers. It was within the limits of this malarial shadow that the foundation of modern gynæcology was laid by Marion Sims, of abdominal surgery by McDowell, Battey, and Gross, of an important part of the physiology of the nervous system by Campbell. Nevertheless, the rule holds good that malaria and science are antagonistic; the exceptions prove the rule. Nor can the inducements for highly educated physicians to settle in thinly settled localities be made stronger by any form of penal or restrictive legislation. Any attempt to fix a standard of requirements or qualifications for practice which shall be the same for such rural districts and for the large cities and manufacturing towns, must result in the adoption of what competent judges would consider so low a standard as to be ridiculous and useless. The demands are widely different, and corresponding differences exist in the sources of supply—that is, in the medical schools.

There is a class of medical schools in the United States whose object is to give the minimum amount of instruction which will enable a man to commence the practice of medicine without much danger of making such serious and glaring blunders as will be readily detected by the public. There are others schools whose aim and object are to make fairly well trained practitioners; the general character of the instruction given in these being substantially the same as that given in your English hospital medical schools. The results of such a three-years' graded course of instruction in medicine as these schools furnish depend upon the character of the material upon which they work—that is to say, upon the general preliminary education possessed by the student at the time of his matriculation. This is evidently too often defective, and only a few schools have thus far ventured to establish any standard of preliminary examination which at all approaches in its demands that which is required in England. The proverb that it does not pay to give a $5000 education to a $5 boy is clearly of American origin, and sums up a great deal of experience. You have nineteen portals of entrance to the profession, and have not found it easy to keep them all up to the standard. In America we have over eighty gates, a number of turnstiles, and a good deal of the ground is unenclosed common. Many of our physicians are more or less dissatisfied with this state of things and with the results thereof, and every year in some States efforts are made to secure legislation which it is supposed will protect the interests of the profession, though those who advocate such legislation are usually prudent enough to claim as their only motive a desire for the protection of the public.

Now, how does this free trade in medicine and the low standard of qualification or no standard at all required by law affect practitioners as individuals? To answer this we must divide the profession into several classes. In the first place, in all our cities, great and small, there is a large class of physicians who are as well educated and as thoroughly competent to practise their art as can be found in the world. They have studied both at home and abroad, have had extensive clinical training, are always supplied with the latest and best medical literature and the most improved instruments, and many of them are connected with hospitals and medical schools. Among them are found the majority of our writers and teachers, and the successful men are the survivors of a struggle in which there has been keen and incessant competition. These physicians, whose positions are fairly assured, and who, as a rule, have all the practice they desire, are not usually active leaders in movements to secure medical legislation, although they passively assent to such efforts, or at least do not oppose them; and their names may sometimes be found appended to memorials urging such legislation. They are clear-headed, shrewd, "practical" men, who know that their business interests are not specially injured by quacks and ignoramuses, rather the contrary in fact, for they are called on to repair the damage done by the quack to people who have more money than brains; and they are not inclined to risk the fate of the Mexican donkey who died of *congojas agenas*, that is, "of other people's troubles."

Then there is another large class of honest, hard-working practitioners, who rely more on what they call experience and common sense than on book learning. Many of these have obtained assured positions of respectability and usefulness, and are comparatively indifferent to medical legislation so far as their own interests are concerned. Others, however, who are not so successful, feel the competition of the local herb doctor or of the travelling quack more keenly, and have more decided views about the importance of diplomas. Among these are the young men who have not yet acquired local fame, and who are apt to become very indignant over the doings of some charlatan in the neighbourhood, or of some druggist who prescribes over his counter. These last are usually quite clear in their minds that the State ought to interfere and prevent injury to the health of the people. I have known two unsuccessful physicians who finally abandoned practice and who gave as a reason for their failure—one that "he did not know enough," and the other that "he had not the manners and tact which would inspire confidence in his patients," but such frank-speaking men are rare.

Thus far, as a rule, the efforts which have been made to secure legislation upon medical matters in America have come from the profession itself, and have been chiefly urged and recommended by physicians. The general public, and even the educated public, has shown very little interest in the matter. It does not demand protection against ignorance, but entrusts the care of its health and the lives of those who are nearest and dearest to it to almost anyone who announces himself as prepared to take charge of them. The number of those who profess to practise medicine in the United States and are not qualified to do so is undoubtedly large, though by no means so large as one might suppose after listening to the impassioned eloquence which is duly aired every year upon the subject. There are some advertising charlatans, and travelling quacks are occasionally to be met with, but they are rare. The most rigid tests of qualification in our profession in the United States are those required of candidates for admission into the medical departments of the army and navy. The standard established for these is about the same as that for the corresponding corps of the English army and navy; and of the candidates who apply, from 70 to 80 per cent. are rejected. Certainly we must admit that this percentage indicates an unsatisfactory state of things. But what evidence have we as to its results upon the health and life of the people? What shall we take as the measure of the difference of skill in physicians? The death-rate? If we compare the death-rate of the United

States with those of other civilised countries, we find that it is as low as any, with the exception of Sweden. Does a low death-rate mean better sanitary condition or more skill amongst the doctors? For the last twenty years the death-rate has been diminishing in England; the average amount of life for each person here has been increased, but I observe that the sanitarians claim this as proof of the value and importance of their efforts, and that nothing is said about its being in any way due to increase in medical skill or to improvements in medical science. Evidently this test is not a convincing one. Almost the only matter in which figures seem to demonstrate the importance of superior medical education and skill is in the statistics of deaths due to childbirth and of the results of surgical operations.

The proportion of deaths from childbirth to the number of births is decidedly greater in the rural districts than in large cities, and among the coloured than among the white population. If this difference were found only in the United States statistics, it might be accounted for by the differences in the trustworthiness of the sources from which the data are derived; but we find similar differences in England, and we must admit that these are probably largely due to the fact that in cities labour cases receive more prompt and efficient professional care than they do in the country. I need hardly call your attention to the results of antiseptic surgery, or of modern abdominal surgery, as compared with those of twenty-five years ago. Here there can be no question as to the improvement. It is well to remember in this connexion that whatever undue prolongation of disease or unnecessary mortality is due to want of skilled medical treatment, occurs mainly among the wage earners—the farmers, mechanics, salesmen, needlewomen, &c.,—and not among the rich, nor yet among the very poor.

Now, seeing that really efficacious legislation with regard to medical education or to the practice of medicine must, like all efficacious legislation, be substantially in accord with public opinion, since it is impossible to continue to punish for any length of time that which public opinion does not condemn; and as the great mass of the people of the United States have not as yet had such evidence as they can understand, and which would thoroughly convince them that it is to their interest to suppress quackery,—it follows that it is necessary to go slowly and to allow such evidence to accumulate.

To me it seems that the most important of the first steps to be taken in this direction is one which has already been taken in Great Britain—namely, the requirement that every death in the community shall be registered, and that in such registration satisfactory evidence shall be given as to the cause of death, sufficient at least to prove that such cause is what is known as a natural cause—that is, that it is not due to crime. When it is admitted that one of the duties of government is to provide for such registration, both in the interests of life and to secure the rights of property, it follows, necessarily, that those persons whose certificates as to the cause of death are to be accepted as satisfactory evidence that there has been no foul play must present evidence that they are properly qualified to make such certificates. The principle is precisely the same as that which induces a government to provide for the examination of the medical men whom it employs in its army and navy. So far as the art of medicine is concerned, the demand has much, though by no means all, to do with regulating the quantity and quality of the supply; and there are few localities in the United States where the qualifications of the medical man are not fully up to the standard which the community is able to appreciate and is willing to pay for. In the natural order of things suffering and death are the remedies for ignorance, weakness, and vice, and the means of preventing the transmission of these characteristics to offspring. These remedies, though effectual, are drastic, and we do our best to avoid them; but perhaps it is well that the penalties cannot be done away with altogether. The laws regulating the practice of medicine in the United States are all State laws. If we were to judge only from what may be found in the statute books, assuming that all the laws contained therein are duly enforced, we should find that nearly two-thirds of the States have laws ostensibly regulating the practice of medicine within their borders. As a matter of fact, however, in over half the States which have laws on this subject no attempt is made to enforce them, and in almost all of them the possession of a diploma, no matter from what source derived, is all that is required. Of the various methods which have been tried in different States to ensure by law that physicians shall be properly qualified I will call your attention to two which are of special interest.

The first is that of Alabama, the principle of which is to organise the whole medical profession of the State, and use it as the means of regulating the qualifications of practitioners and of caring for the public health. The Medical Society of the State of Alabama with its branches, the county medical societies, thus forms a part of the machinery of the Government; it appoints boards of medical examiners, selects State and county sanitary officials, supervises the registration of vital statistics, the administration of quarantine, &c.—in short, it is the State Board of Health, and the county branches are the county boards of health. In that State the possession of a diploma does not give the right to practise, it simply enables the owner to go before the examining board. The examinations before the County Board are partly in writing, and are subject to review by the State Board, which has in some instances publicly condemned the local examinations as not sufficient. This system has now been in operation nine years, and has gradually been consolidated and improved by educating the local boards, and getting all physicians interested in it, until it is now working fairly well. Much remains to be done, and it is too soon to predict results; at present, the success of the system is largely due to the wisdom and energy of one man, who has given his whole time and labour to the work, and it remains to be seen whether the machine which he has built will work well without him.

The second system to which I will call your attention is that of the State of Illinois, which was commenced in 1877, or about the same time as that of Alabama. In Illinois anyone who presents a diploma, or licence to practise, from a legally chartered medical institution in good standing, is entitled to practise, and the State Board of Health is to decide as to what shall constitute "good standing." The Board of Health also examines all persons who do not possess satisfactory diplomas, and who nevertheless wish to practise in this State.

One of the greatest practical difficulties in the way of providing any system of State examinations in medicine in the United States is that public opinion will not support any law which can be supposed to condemn or in any way to injure homœopathic and eclectic practitioners or their schools, and hence any proposed law relating to medicine, or to the organisation of State boards of health, which does not recognise the existence of these sects will, in many States, at all events, meet with enough opposition to defeat it. In Illinois this difficulty was surmounted by the arrangement, that of the five physicians on the board one should be homœopathic and one eclectic. The Kansas law, passed last year, goes further in this direction, and provides that appointments must be so made that no school of medicine shall ever furnish a majority of the members of the board. Much to the surprise of many, the Illinois plan has worked very well,—there has been no quarrelling in the board—and the homœopathic and eclectic members seem to have upheld quite as high a standard of qualification as their fellow members. The results of the work in Illinois have been very good. A large number of ignorant charlatans have been forced to leave the State. The requirements of the board as to what shall constitute a medical college in good standing have been raised, and it has thus caused improvement in the medical schools, not only of Illinois, but of other States. Moreover, the neighbouring States have been stimulated to action, not only by the force of example, but because they received the men who had been driven out of Illinois, and found the accession an unpleasant one.

As in the case of Alabama, it is too soon to judge definitely of the results; and in Illinois, also, the satisfactory working of the system is largely due to one man—the secretary and executive officer of the board, who has given his entire time to the work. I do not by any means wish you to suppose, however, that I consider this as being a serious objection to this or any other plan, for in the building up of any organisation, or the carrying out of any system, much must always depend upon some one man.

The relations of the United States Government to medical education and to the practice of medicine are indirect only, the regulation of these matters by law being part of the police power which, under the constitution, is reserved exclusively to the individual States. The United States employs physicians in its Indian Department, in the Pension Department, in the Marine Hospital Service, and in the

medical departments of the army and navy; and it has power to regulate the practice of medicine in those territories which are not yet organised into States, and also in the district of Columbia, but thus far it has made no use of such power. The qualifications of physicians employed in the army and navy, and in the Marine Hospital Service, are determined by examinations made by boards of medical officers belonging to those services. The possession of a diploma from a respectable medical college is a prerequisite for such examination, but beyond this it does not count—that is to say, the examination is the same for the holders of all diplomas, and covers all branches of medicine. But while the relations of the general government to medical education are thus indirect, they have of late years become of very considerable practical importance, and are now exerting much influence upon medical investigations and literature. This is being effected by the museums and libraries which are now being formed under the auspices of the Government at Washington, and also to some extent by certain special investigations undertaken by the Government in the interests of preventive medicine. Of these various agencies one of the most important is the library which has been formed at Washington, under the auspices of the medical department of the army in connexion with the Army Medical Museum; both of these institutions being a part of the results of the late civil war. The museum was at first formed to illustrate military medicine and surgery, giving the results, primary and secondary, of injuries inflicted by modern weapons of warfare and of the diseases of armies in the field; in which direction the collection is unrivalled in extent and completeness. Gradually its scope has been enlarged to include illustrations of anatomy, development, and all branches of pathology and therapeutics, so that it is fast covering the whole field of medical science. In like manner, the library, which commenced in a collection of those books relating solely or especially to military medicine and surgery, which were required in the compilation of the "Medical and Surgical History of the War," has expanded into a great medical library, which is now one of the best practical working collections of the kind in the world. These collections, then, no longer appertain exclusively, or chiefly, to the business of one department, but belong to the whole profession of the United States as a body; and the department which has charge of them is managing them from this point of view. The influence of the library in stimulating research, and upon the quality of medical literature, is already very perceptible, and is destined to increase with advancing years. I think I may also venture to claim that the utility of these collections, and especially of the library, is by no means confined to the medical profession of the United States, for the catalogues and indexes which are being issued in connexion with them are of service to medical writers and teachers all over the world.

As regards investigations into the causes of disease undertaken at the expense of the general government, only a beginning has as yet been made; but it is sufficient to indicate future possibilities and probabilities. The main importance of the work of the National Board of Health, which was organised in 1879 under the stimulus of the great yellow fever epidemic of the previous year, was due to investigations upon the causes of yellow fever and diphtheria, upon the relations of soils and of water-supply to certain diseases, &c.—investigations of the same general character as those which are being prosecuted under the auspices of the Local Government Board in this country, and of the Imperial Board of Health of Germany. It is true that, owing to circumstances which I cannot here explain, the work of the National Board of Health has been stopped; but there is every probability that it will be resumed, with perhaps some change of organisation, at no distant day, and I need not dwell upon the vast importance to medical science of organised and systematic work in this direction. Similar investigations have been undertaken by State boards of health, and especially by the State Board of Health of Massachusetts; and the fact that Governmental health departments are tending to work in this direction is significant as to future co-operation from such sources. In this connexion should be mentioned the National Museum of Hygiene, which has been formed under the direction of the Medical Department of the United States Navy, which is now one of the most instructive collections of the kind in the world, and has also connected with it an excellent library and a well-equipped laboratory.

Comparative and experimental pathology is also receiving attention from the Government under the direction of the Department of Agriculture, which is doing some good work in the investigation of the diseases of our domestic animals. Our investigators are fortunately not hampered by anti-vivisection laws, and there is little danger that they ever will be, for though we have our due proportion of fanatics and seekers of notoriety who wish to emulate the British Antis-, their true motives are so well understood that they have little power to do mischief.

Of medical associations in the United States there are several classes. We have a few local societies analogous to clubs in their organisation, which own property in the form of buildings, libraries, &c., are somewhat conservative in their selection of members, and are only to be found in large cities. Of these the College of Physicians of Philadelphia is the oldest and has the largest and best library and museum; it will celebrate the hundredth anniversary of its existence next year. In New York the Academy of Medicine, and in Boston the Medical Library Association, are of the same character, and in general each large city has a similar society, although as yet they have not become fully anchored and established by the acquisition of property. The second class includes local societies devoted to specialties, such as pathology, obstetrics, &c. These also are found only in large cities, and as yet are few in number. Four of them only have published transactions. Corresponding with these are national societies devoted to specialties such as gynæcology, ophthalmology, surgery, pathology, and clinical medicine, &c. These societies meet annually, elect their own members, exercising care in the selection, and publish valuable transactions.

Another class is composed of the county medical societies, which strive to include all regular practitioners residing in their precincts. From these are sent delegates who form the State medical societies and the American Medical Association. The mode of organisation varies somewhat in the different States, but the representative principle prevails in all. Most of these societies publish transactions, and the American Medical Association now has its journal.

As to the condition of medical science and art in America, it partakes of the general progress, for the press now makes all discoveries the common property of the civilised world. The marked feature of the present epoch is the recent advance in knowledge as to the relations between micro-organisms and certain diseases, and the strong stimulus which this has given to preventive medicine. Sanitation is becoming fashionable, and if we may believe some of its votaries, it is a very simple matter to prolong the average lifetime to the scriptural, "threescore years and ten." All that is necessary is that everything shall be clean, and every person virtuous. Having learned to distinguish those diseases which can be prevented much more easily and certainly than they can be cured, we may turn them over to the sanitarian, who has his own battles to fight with ignorance and prejudice. If he succeeds, and so far as he succeeds, he will change in certain respects the work of the practitioner. The lives which are saved from cholera and typhoid, from consumption and diphtheria, and from the acute specific diseases, will, at last, be weakened and destroyed in other ways. The work of the physician will not be lessened by preventive medicine, it will simply be required more for older persons, and for another class of diseases. As sanitarians must depend upon practitioners for much of the information which is essential for their work, it follows that if preventive medicine is to become a working power, it will bring the mass of the profession into closer relations with the State than its members have held heretofore. What these relations shall be is one of the most interesting, and, at the same time, one of the most difficult, of the many problems with which we, or our successors, must deal. I have referred to some experiments on this subject which are now being tried in America, where it is much easier to make such trials than it is in an older country hampered with vested interests. Just at present, in this, as in a number of other things, our tendency is towards centralisation, both in the several States and for the whole country, and it is not improbable that we may go far on this road in the future.

I come now to the consideration of the second part of my subject—namely, the direction or manner in which we have reason to hope that medicine will be developed in the United States, and the kind of co-operation which you may reasonably expect to receive from the medical profession of that country. A marked feature of the present day, in medicine as in other things, is the tendency to

specialisation in study and in practice. But this very development of specialties, of increasing minuteness in the division of labour, increases the necessity for co-operation and in fact tends to create what we may call the specialty of co-operation. Formerly a rifle, or a watch, was made by a single workman. No two instruments were exactly alike, each piece had its own individuality and was not interchangeable, and the cost of the whole was such as to put it beyond the reach of the multitude. Now, the work on these things is greatly subdivided; one man makes only one small wheel, or spring, or pinion, and another another, each doing his work according to a uniform pattern, rapidly, perfectly, and at comparatively small cost. But, in addition to the workmen who make the individual parts, it is now necessary to have one person specially skilled in making drawings and preparing patterns, another to assemble the completed parts, and a third to test the whole after it has been put together. As the centrifugal force increases, the centripetal power must also increase. In one sense medicine, as we have it to-day, is the result of co-operation, not of deliberate, centrally planned and direct co-operation, but of natural selection from results produced by many men, often working at cross purposes and, therefore, wasting much energy, but nevertheless working, though blindly, to a common end. And it is safe to predict that in the future much of the best work will be done in the same way, by individual effort inspired by the love of science, by personal ambition, &c. But the results obtained in this way come slowly, and some things that we want can hardly be obtained by individual effort, even if we were willing to wait, hence we must look to organisation for help.

This is an age of machinery, of exchanges, of corporations—for all these correspond to one and the same fundamental idea. Men make machines to do what the individual cannot do; and they make them not only of brass and iron, but of men; for such an obvious source of power to the man or men who can master the combination is not likely to be overlooked. One result of such organisation is seen in our encyclopædic works on medicine, whether these be called dictionaries or handbooks; another in the great medical journals; another in associations which seek to wield political influence; another in the comparatively recent attempt at collective investigation of disease. With these may be classed also the attempts of Government departments to make scientific investigations, to form libraries and museums, to do things which require long continuity of effort on a definite plan in order to produce the best results. And it is by the combination of all these, with the efforts of individual workers, that substantial advance and improvement are to be effected. In this broader view of co-operation it is interesting to consider those fields of labour to which comparatively few physicians can devote themselves, because of want of time and opportunity, but whose proper working is, nevertheless, of the greatest importance to the practitioner. One of these is experimental laboratory work, and in this direction the prospect of valuable contributions from America is now exceedingly good. Some of the wisest of our most wealthy men have shown their appreciation of the responsibilities which riches entail on their possessors by seeking new channels through which to benefit their fellow-men. While the old and well-known methods of endowing hospitals and charitable institutions are not neglected, there is apparent an increasing tendency to endeavour to promote the advancement of knowledge, and especially of such knowledge as tends to the mitigation of suffering and the improvement of the race, to furnish means for the investigation of disease, to provide laboratories, and to endow medical schools, and thus place them beyond the reach of the temptations and difficulties which must always exist when such schools are dependent upon the fees of students, and are, therefore, practically commercial manufacturing establishments.

As illustrations of this tendency, I may mention the bequest of £1,400,000 by Johns Hopkins to endow, in the city of Baltimore, a university and a hospital of which the medical department is to be a special feature, to be provided with the best laboratory and other facilities for original investigation as well as for teaching; the gift of Mr. Carnegie to the Bellevue Hospital Medical School of New York in the shape of a well-equipped pathological laboratory; the presentation by Mr. Vanderbilt, and members of his family, to the College of Physicians of New York, of £200,000, to provide for that school new buildings and clinics having the best means of teaching and research, and the endowment by an unknown donor of a laboratory for the University Medical College of New York, with the sum of £20,000. Last year, in his retiring address as President of the New York Academy of Medicine, Dr. Fordyce Barker referred to this tendency to regard wealth as a trust to be used for the benefit of humanity, and after sketching the requirements of the Academy on a scale which would require an endowment of at least a million of dollars, predicted that such an endowment would be furnished by wealthy citizens of the city. I believe that he was right, and that his prediction will become history.

As the class of men who have wealth, leisure, and knowledge becomes greater, there comes an ever-increasing demand, not only for the best medical skill, for the most expert practitioner, but also for exhaustive research in every direction which promises to furnish new means for the prevention or relief of suffering, and for warding off as long as possible the inevitable end, and hence there is little reason to doubt that the examples I have named will be followed by others in the near future. With such opportunities, and under such conditions and influences, the stimulus to the young and ambitious worker is strong; we have abundance of material of this kind upon which the process of natural selection can operate, and there is little reason to doubt that the result will be substantial and valuable contributions to physiology, pathology, and therapeutics.

I have already referred to some of the work which has been undertaken by the United States Government for the benefit of medicine and of the medical profession in the formation of a library and the providing of means of assistance in bibliographical research. There is another most important means of advancing medical and sanitary science which only a government can furnish, and in which field of work England now stands pre-eminent—I refer to vital statistics. In this field the United States Government has thus far done but little, yet enough to show the great interest and value of what we have a right to hope will be done in the future by combining the work of the several States. This is one of the fields in which international co-operation is most desirable; it alone can furnish data sufficiently complete and reliable for a scientific consideration of the relations of disease to geographical and race distinctions. Geographical pathology is a very old branch of medicine, as old at least as Hippocrates, whose treatise on airs, waters, and places is justly famous. Permit me to remind you of its opening clauses. "Whoever wishes to investigate medicine properly should proceed to consider the seasons of the year, and what effects each of them produces—the winds, the qualities of the waters, the situation and exposure of the city, the character of the ground, and the mode of life of the inhabitants." Then, says the wise old Greek, "from these things he must proceed to investigate everything else." There is a breadth of view in that last sentence which is particularly satisfactory. Since the days of Hippocrates there has accumulated a vast amount of literature relating to the supposed connexion between the topographical peculiarities of different cities and countries and the diseases that prevail in them; but when the books and essays which come under the heading of "Medical Topography" are examined, it will be found that the topographical part is much more complete than the medical, which latter is mainly confined to the consideration of malarial diseases, and is vague and indefinite with regard to their relative prevalence.

Much the larger part of our really valuable information on this subject has been obtained within the last twenty-five years, as Professor Hirsch points out in the preface to the recent edition of his very valuable Handbook of Geographical and Historical Pathology, and while the contributions of the United States to this branch of medical science have been already important, I hope to be able to show you that they are probably destined to be of steadily increasing importance in the future. Considered as a body, the opportunities of the medical profession of the United States for the study of the manifold influences which can cause, modify, or prevent disease, are in some respects unequalled. As regards peculiarities of climate, soil, altitude, &c., the country is so large as to afford almost every variety of combination, so that nature may be said to be making a series of experiments on a grand scale upon the mass of humanity which is so rapidly increasing in the New World. Especially is this the case with regard to the problems of heredity as connected with the mysterious relations of

certain forms of disease to race. America is at present the great mixing bowl into which are pouring streams of human life from origins the most diverse, from regions the most remote. Black and white, red and yellow, long skulls and short skulls, Celt, Teuton, and Slav, are being brought together under similar conditions of climate, food, and occupation, thus permitting of the comparison and study of the different effects, if such exist, which result from variations in parentage under conditions of exposure to the same causes of disease. For a little time, a generation or two at least, the different streams remain pure, then there is more or less mingling, in some cases very little, in others very intimate, but always there is an opportunity of studying the races separately, as well as of investigating the results of their various mixtures.

To illustrate the possibilities in this direction, I will call your attention to some peculiarities in the distribution of deaths from certain causes in different parts of the United States, and for this purpose I shall make use of the data from our last census, taken in 1880. We have no general and uniform system of registration of births and deaths. The larger cities, and about half a dozen States, have such a system, but for much the larger portion of the country the only means which we have for determining differences in amount or causes of mortality in different localities is through the census, which is taken once in ten years. The data thus obtained with regard to deaths are imperfect, because when these are collected, only at the end of the year, about 30 per cent. of the deaths are unrecorded; and they are inaccurate, because the reports of the causes of death are not furnished by persons competent to give reliable information with regard to them. Nevertheless, these data are the best that we have, and although for a large part of the country they do not give us the actual number of deaths from any cause or set of causes, they do furnish some interesting information with regard to the relative prevalence and importance of certain causes, and suggest questions and lines for future investigation, although they do not furnish definite and scientific answers.

Take, for instance, this map of the United States, upon which, by varying shades of colour, is shown the proportion of deaths reported as due to cancer, as compared with the reported deaths from all causes. Cancer, using the term in its broadest sense, is a disease which seems to be gradually increasing in frequency among civilised nations, and, possibly, to have a tendency to increase with the advance of civilisation. In England and Wales the proportion of deaths from this cause seems to have nearly doubled within the last twenty-six years, and a similar rate of increase can be made out in certain parts of America. How far this increase is a real one, and how far it is due simply to improvement in diagnosis, is a question yet unanswered.

The mortality from cancer in the United States is proportionately greatest in the New England States, somewhat less so in New York and Pennsylvania, and it causes the least proportion of deaths in the Mississippi Valley and the South generally. The proportion of deaths from cancer in the United States is somewhat greater than it is in England; but it is not possible to make any accurate comparisons in this respect. Now, why are the shades on this map so dark in the North-east and so light in the South? In the first place, cancer is a disease the mortality from which steadily increases with advanced age, as you may see from this diagram. Hence, cancer causes a higher proportion of mortality in those localities which have the greatest proportion of population living at advanced ages, and in the United States these localities are the New England States, as you will see by this map. One deduction from this, which may perhaps not have occurred to all of you, is that a large proportion of deaths from cancer indicates, to a certain extent, that the locality in which it occurs is a healthy and long settled one, since it has probably a relatively large proportion of inhabitants, and especially females, of an advanced age. But another explanation of the peculiar shading of the cancer map is found in the relations of race to the tendency to death from this disease. The proportion of annual deaths from cancer per 100,000 living population was, in round numbers, 28 for the whites and 13 for the coloured. That is to say, cancer is more than twice as prevalent among the whites as it is among the coloured in the same localities, for these figures apply only to the South. On the other hand, cancer appears to cause a greater proportion of deaths in persons of Irish and German parentage than it does among the rest of the white population, the indications being that between the ages of fifteen and sixty-five the Germans are especially liable to cancer, more so than the Irish, and decidedly more so than the average white population. Now, when we remember that the greater part of the coloured population is in the South, and the greater part of the Irish and German population is in the North, we have another reason for the differences in mortality caused by this disease in the two sections.

Again, take this map, showing the distribution of the deaths from scarlet fever during the census year. You see that this also was most fatal in the North, and, here again, the influence of race comes in, because in the negro race the mortality from this disease appears to be very low. This disease has always been much rarer in the South than in the North, and the contrast was much stronger in former years than it is at present; but this cannot be explained solely, or even to any great extent, by difference of temperature, because scarlet fever has often been epidemic in the tropics, and, on the other hand, in many localities in temperate climates it is among the rarest of diseases.

Here is another map showing the distribution of deaths reported as due to diphtheria during the year. Diphtheria is a disease which has been unusually prevalent in the northern portion of the United States for several years. During the census year it caused 2374 deaths out of every 100,000 deaths from all causes, while in England, for the year 1880, the deaths from diphtheria were 532 per 100,000 deaths from all causes—that is to say, the comparative mortality from this disease in England was less than one-fourth that of the United States for the same period. Diphtheria, again, is essentially a disease of the North, but especially of the North-west. It causes an excessive mortality in children of German parentage, sufficiently so to show that here again the influence of race comes into the problem, although probably only indirectly—that is to say, it is probably the habits of a peculiar class of people which favour the propagation of the disease rather than any physical peculiarities in the structure of their bodies. Two more illustrations of the geographical distribution of disease in the United States may be of interest in this connexion. The first is that of consumption, the second of pneumonia.

Consumption is a vague term, and, as used in the census, no doubt includes many cases which were not true tubercular phthisis. It is reported as causing 12 per cent. of all the deaths, or more than any other single cause. In England and Wales, in 1880, it caused a little over 9 per cent. of all the deaths. Such wholesale ratios are, however, of little interest or value. There are very great differences in the liability to this disease in different parts of the United States, as the map makes sufficiently evident; and it is from a study of the causes of these differences in the data derived from large masses of people, combined with clinical histories and experimental laboratory work, that we have good reason to hope to obtain knowledge, not only of the causes of this disease, but of better methods of prevention and treatment than are now at our command. It causes a greater mortality among the Irish than in other white races, and perhaps a greater mortality among the coloured than among the white.

Next to consumption, pneumonia is reported as causing the greatest number of deaths in the United States during the census year, giving a ratio of 8·3 per cent. of all deaths, as against 4·8 per cent. in England and Wales in 1880. Here, again, the local distribution of deaths is interesting, and the contrast between the map of consumption and that of pneumonia is very striking. Here, again, we find that race peculiarity is an important factor in the problem, the proportion of deaths from pneumonia among the coloured being much greater than it is among the white.

I have elsewhere commented more fully than it is possible to do here upon these peculiarities of the distribution of certain causes of deaths in the United States.[2] In fact, my only object in calling your attention to the subject is to indicate the direction in which we may hope for good work hereafter, which indication is the chief, if not the only, valuable result of the work already done. In the brief comments which I have made upon these maps you will have noticed the stress which I have laid upon race peculiarities. These race problems are simply problems of

[2] See report on Mortality and Vital Statistics of the United States as returned at the tenth census, 2 vols. 4to, Washington, 1885-1886.

heredity taken in mass, and there is no need to urge upon an assemblage of medical practitioners the importance of considering family peculiarities in diagnosis, prognosis, and therapeutics. That the questions involved are difficult and complicated is true, but we are already possessed of more knowledge with regard to them than is commonly supposed.

In a lecture on "Life," delivered a few months ago, Professor Brookes, of the Johns Hopkins University, illustrated this as follows: "If I am placed, with my eyes bandaged, before a stone lying free on the surface and am told to kick it, and if I know at the same time the size, shape, and weight of the stone and the character of the surface, I can form a pretty accurate idea as to what the result upon the stone will be. While if the object to be kicked is a dog, and I am given precisely the same data, I cannot tell what will be the effect. But if I can see the dog, I can in many cases predict pretty accurately. If he is a bulldog he will do one thing; if he is a Gordon setter he will do another." And, in like manner, the old family doctor knows that when a particular disease appears in his neighbourhood he may expect to see it produce in one family convulsions, in another collapse, and in a third little or no danger or inconvenience. This kind of knowledge is, however, at present mainly confined to individuals, it has not become a part of the world's knowledge; it is not defined—in other words, it is not scientific. To make it so is the work of the future, and in this work I hope that we shall be able to help you.

I have spoken to little purpose if I have failed to show you that there is a great deal of human nature in American physicians, and that it is a kind of human nature with which you are tolerably familiar. It should be so, for we are of the same race, a race which, perhaps, as Emerson says, "sets a higher value on wealth, victory, and material superiority than other men, has less tranquillity, is less easily contented." Our ancestors were restless, fighters, freebooters, and from these ancestors we have the common inheritance of energy; of what *we* call "firmness," and our opponents unreasonable, pigheaded stubbornness; of liking to manage our own affairs, and, at the same time, to exercise a little judicious supervision over those of our neighbours; of hatred of humbug and lying; and, in spite of our discontent, of a firm belief that our wives and children, habits, houses, modes of business, and of treating disease are, on the whole, better than those of any other people under the sun. Privately, and between ourselves, we grumble and declare that the country and profession are going to the dogs—nay, we must do so, or we should not be of true English blood; but there is no need for me to tell you that these are only "growing pains," and not symptoms of progressive ataxy. While we must consider the difficulties in the way of the improvement of the science and art of medicine, difficulties due to ignorance, to indolence, to conflict of interests, and to the eternal fitness of things, the existence of such difficulties is not a matter to be bemoaned and lamented over. These obstacles are the spice of life, the incentives to action, the source of some of the greatest pleasures which it is given to man to experience. The child, spending a happy hour with its new puzzle is a type of the scientific investigator. The naturalist who objected to the statement that this is a miserable world which it is well to be soon done with, on the ground that there are still many species of rhizopods which he had not examined and classified, is another type. On the ethical and sociological side, the matter is summed up in Ruskin's aphorism, that "Fools were made that wise men may take care of them." It is surely not without cause that there has been given to us this restless spirit of inquisitiveness, this desire to compass the heavens and the earth, this raging, infinite thirst for knowledge; it is the outcome of brain training and natural selection for thousands and tens of thousands of years. We are in a period of the world's history characterised by material prosperity, by increase of populations, by tendencies to uniformity, to the making of individuals of small account. According to the Swiss philosopher, Alphonse de Candolle, this is to last a thousand years or so, after which the pendulum will swing the other way, and there will follow a long period of diminution and separation of peoples, and of decadence. Against that decay of nations we know of but one remedy, and that is increase of knowledge and of wisdom. And this increase must be in *our* knowledge, in the world's wisdom, and not merely in that of John, or Fritz, or Claude. As each man has special opportunities and duties, if he can only recognise them, so it is with guilds, with professions, and with nations.

I have tried to indicate to you some of these opportunities which are presenting themselves to my colleagues, your brothers, in the lands beyond the sea, and I hope that I shall not be considered rash or vainglorious in saying that I believe they will so use those opportunities as to return compound interest for what they have received from the storehouse of our common inheritance. Force changes form and place, the stored energy of the soil of our plains and valleys has been coming here in the form of meat and grain, has appeared in muscle and brain, and in a hundred other shapes, but none has been destroyed; our loss has been your gain, and in our turn we have received full and fair exchange.

It is our part now to remember that there are not two springs in the year, there are not two periods of youth abounding in energy and desire, or of manhood's strength and self-poise, in the life of any man or of any nation, and for us, as for those who have been before us, the Kanuri proverb holds true, "*Kabu datsia, kargum bago*"—The days being finished, there is no more medicine.

ABSTRACT OF

The Address in Surgery,

Delivered before the British Medical Association, Wednesday, August 11th, 1886,

BY FREDERICK ABELL HUMPHRY, F.R.C.S.,
SURGEON TO THE SUSSEX COUNTY HOSPITAL.

THE MEDICAL ASPECT OF SURGERY.

AFTER a few introductory remarks Mr. Humphry said: "In former years your visits have been made to great centres of industry and great centres of intellectual and professional activity and vigour. Your visit this year is to a town probably quite as large as many at which you have held your meetings, but it is a town of a peculiar character, having no special manufacture, no definite industry of its own; it is wanting in many causes of those great surgical injuries and surgical disease that form the fruitful subject of such a paper as this. In fact, it is a town where not disease, but recovery from disease, is, medically speaking, the chief characteristic. And so, in the wards of our hospital, the numbers of serious and acute diseases do not hold the ordinary proportion to the chronic and strumous cases; hip-joint disease, necrosis, and similar affections that abound in the surrounding country districts.

"In casting about, then, for a fit subject for these remarks, I have not chosen to bring before you any group of cases from my own experience, or any special form of treatment for any special disease, but rather to take a wider and, I trust, as interesting subject for consideration. Looking back over the last half century, I suppose the greatest change that has occurred in the practice of surgery has been the development of the so-called specialties. This development is cause and consequence, too, of the enormous increase in the knowledge of the art and science of surgery that has occurred during that period.....But, while fully recognising and valuing these great and rapid advances in different directions, it may be worth while to pause—as it were to take breath—and even look back on the ground already covered. Are we going too fast? Old theories, old opinions, old treatment, old books, are they sufficiently studied and considered? Are the old relations between medicine and surgery still maintained? Is the medical side of surgery (if I may so speak) holding its ground, and making the same advances as the more strictly called surgery?

"Of late years, how much has surgery done for medicine? Has medicine done as much for surgery, and has the medical treatment of surgical disease received the same consideration, or made the same rapid strides as the study and development of operative procedure? It is now more than fifty years ago that Sir William Lawrence, in an introductory lecture at St. Bartholomew's Hospital, said: 'It is the boast of modern surgery to have greatly diminished the number of operations.'.....That improved knowledge of which Lawrence boasted, and to which he referred as the cause of lessened operations, has in itself, by the medical aids to surgery it has introduced, been the main cause of their greater frequency and of their increased success. But,

after all, the fact that, in any case, recourse is had to an operation is an admission that medical treatment has failed in curing the disease. We can hardly open an abscess without acknowledging that, by simpler means, we have been powerless to combat the inflammation that preceded it. In what state, then, is our knowledge as respects surgical medicine?

"And, first, of inflammation—that subject which occupies rightly so much space at the commencement of all surgical works, and is the enemy we have to meet at all corners in the treatment of surgical disease. It would occupy too much time here to compare the present state of our knowledge of those pathological changes comprised under the head of inflammation with what it was, say, in John Hunter's time; for, in spite of our general advancement, and with the additions of chemistry and the microscope, our views, for all essential purposes of treatment, have not been materially altered in principle. And yet the treatment of inflammatory affections has undergone considerable modification, due, no doubt, to the altered conditions of life. In bygone days a man really lived by the sweat of his brow, his occupation was a more active one, and, with fewer holidays and fewer aspirations to be rich, he spent the even tenour of his days in greater health and more comfort. But now life is a struggle; competition and the anxiety to be rich give a man anxious days and sleepless nights. His brain is used to the neglect of his body, and, when his holiday comes, he shrinks from the fatigue of its enjoyment. Illness then finds these two men in very different conditions. Instead of a man who, as formerly, would bear bleeding and active treatment, we now get a man in whom the nervous system predominates, whose digestion is out of order, and to whom sedatives and stimulants are necessary. This change has become so marked, almost so universal, that we are in considerable danger of forgetting the principles of the antiphlogistic treatment, or perhaps we are timid in putting them into practice in those cases really requiring it. We are inclined to smile at the way in which our forefathers were bled and purged because they had received some slight injury, the result of accident; and many were perhaps bled and purged too freely; but no one who has seen, not only the relief from pain, but also the relief from impending suffocation following a prompt bleeding, in the case of a man suffering severely from fractured ribs, can doubt that the principle, when properly applied, still holds good. ..... In inflammatory affections of other organs, also, we are probably becoming too timid in the use of depletion. The onset of many local inflammations may be cut short by a free and timely local bleeding. Even a strumous affection of the hip-joint will often have an inflammatory commencement, perhaps following some slight injury; if this condition be recognised sufficiently early, and be treated by the application of a few leeches in addition to the ordinary long splint, the inflammatory part of the illness may be controlled, and opportunity be given for the constitutional part of the malady to be arrested by other means. ..... In medical surgery, syphilis is one of the subjects that has necessarily received much attention. Compared with, almost classed among, the exanthemata, with its period of incubation, its local manifestations, and its subsequent constitutional symptoms, its pathology seems to have been put on a surer foundation, and the principles of treatment are consequently of a more definite character. Still, all this further experience and investigation does not invalidate in the main either the views of pathology or of treatment as laid down by John Hunter. Its further history has, however, been much extended, and a whole train of symptoms not mentioned by the older writers on syphilis have been explained as due to specific deposits; and the term 'visceral syphilis' now includes many pathological conditions that were certainly not recognised as due to this disease. In treatment, now as formerly, mercury is the one remedy—at all events, in the early stages; but salivation, formerly looked on as the necessary evidence of mercury having affected the system, and with it the constitutional disorder, is not considered necessary—indeed, is now supposed not to have so good an effect as the slower result obtained by the long-continued use of small doses. In this way the patient does not suffer from the treatment as well as from the complaint, and is able to continue any active occupation he usually follows. On the other hand, in the use of iodide of potassium for the gummata and other tertiary deposits, it would seem that the further they are removed in point of time from the primary affection, the greater the necessity for its free administration. Symptoms yielding slowly, or not at all, to small doses will, if these be quickly and largely increased, soon show signs of decided improvement..... Cancer still remains of all diseases, though unfortunately one of the most common, one of the most obscure and the most intractable. It still defies all our attempts at cure. ..... Beyond the relief from pain, medicine has, at present, proved useless. From time to time remedies have been tried, and some have held their ground for a season; but after a long experience have proved of no avail. But we should not be deterred by this failure; those who are specially working at this subject, and who are connected with hospitals for its treatment, are always open to try fairly any remedy which can show any reasonable prospect of success; and surely we may yet hope the time will come when some relief, perhaps some cure, may be found for this dire disease. M. Pasteur has recently opened a wide field for investigation of this kind; may we possibly look for any help from following the lines he has laid down in the treatment he has adopted for hydrophobia and some other diseases of the brute creation? ..... Very early removal is at present our only remedy; but surely the efforts of surgical medicine should be directed more than they have been to the medical treatment of cancer. Surgery has done much of late for its removal from regions hitherto looked on as inaccessible; how far greater the triumph, if, by remedies prophylactic or otherwise, some method of treatment could be discovered that would obviate the constant recourse to the knife, with even then a strong probability of a return of the disease. Till lately, the physician has laid claim to the three great cavities of the body as his peculiar province, but this is so no longer. The surgeon is now called on to assist in their treatment when, from the occurrence of inflammatory effusions or morbid growths, medicine is manifestly powerless; and there is now scarcely an organ that has not been attacked by the operating surgeon with a view of relieving some pathological condition. But, while the surgeon is thus intruding on the physician's province, it behoves him also to participate in the physician's knowledge; while surgery is steadily advancing by introducing new operations and perfecting old ones, is surgical medicine equally advancing by improvements in diagnosis, in its power specially of laying down definitely those indications that make such operations advisable? Surgery of this kind is of a comparatively recent date; but, to the credit of modern surgeons, it may be said that with their increased skill in operating has also increased their skill in diagnosis..... Diagnosis has, however, arrived at a very high development in determining the presence and locality of tumours in the brain, and that with sufficient accuracy to warrant the surgeon's attempt at their removal. The cases, of course, at present have been few, but sufficiently numerous and sufficiently successful to justify further trial; but with our present knowledge there are, I think, few of us who could depend on their powers of diagnosis enough to encourage them in undertaking so serious an operation..... Still, in spite of early and accurate diagnosis, in spite of advancing medical knowledge, operations are still increasing.

"Anæsthetics, and now antiseptics, have been the chief medical helps to the operating surgeon. The administration of chloroform (as a type of the anæsthetics) is now, from the natural requirements of the patient, so necessary a part of the operation, that it becomes more a matter for theoretical than practical consideration as to whether its use is attended or not by any disadvantage in the further progress of the case. The immediate gain to the patient, excluding the very few sad exceptions, is of course enormous. There can be no doubt that the introduction of antiseptics has both increased the number as well as the success of operations. Certainly, many of the large abdominal operations would not have been undertaken unless the surgeon believed that, by their use, the patient was freed from most of the casualties that follow such proceedings. Records of cases treated antiseptically show marvellous results; but of late as marvellous results are occurring in the hands of those who have relinquished that treatment. By antiseptics, I would at once say that I include those means by which septic matter is prevented from being absorbed into a wound; but while fully recognising the importance of Sir Joseph Lister's experiments with regard to the fermentative process and the resulting germs, I cannot believe that on their presence or absence depends the health or otherwise of a wound..... I must also mention here the very great advantage to hospital

surgery from the recent very laudable antiseptic *furore* among the nurses. We must all, I am sure, attach the greatest consequence to the improvement, not only in the education and the social status of our present race of nurses, but also in their great attention to the cleanliness of the patients, as well as their wounds. I would admit, then, the great gain to surgery from the use of antiseptics; but I would limit this admission to the gain from the absence of the putrefactive change, not to the absence of germs and the fermentative processes therein implied.

"Among the recent aids to surgery must be mentioned electricity. From its stimulating effects on the nervous system, it has long been used to give tone to limbs and muscles weakened by disease or injury; but of late advantage has been taken of the chemical effect produced during its passage through the tissues, and of the decomposition that ensues, to cause resolution of tumours or coagulation of blood. In this way it has proved chiefly useful in the treatment of those large thoracic aneurysms that are not amenable to other surgical relief. The clotting that takes place between the needles introduced well into the cavity of the sac becomes the focus for still further coagulation; and in this way, perhaps after repeated applications, the increase of the aneurysm has, in some few cases, been arrested, and, in several, amelioration of symptoms or delay of fatal ones has been accomplished. In nævi and small blood-tumours, electrolysis has the advantage of curing the disease with certainty, and with but little scar. Probably in medical, as in social, life, electricity has not yet fulfilled all the requirements we may expect of it. Some further development of the telephone and the electric light, in its application to medical purposes, will almost certainly take place, and large additions will, we may fairly hope, by their help, be made to our present means of surgical diagnosis.....

"Among the medical aids to the treatment of surgical disease, it would be disloyal of me, speaking in this place, and after a long residence in this town, not only to mention but to enforce the great advantage to be gained by sea air. Besides the bracing effect, as it is popularly called, of sea air, there is no doubt that many surgical diseases distinctly benefit by a sojourn here. Roughly speaking, the effect on people in health on coming to Brighton is somewhat to check the natural secretions; and, in like manner, probably, patients suffering from exhausting illnesses or discharging abscesses are certainly benefited. They not only improve in general health, bnt the discharge lessens, a sinus takes on a more vigorous action, and night-perspirations are much diminished.....

"But you will say, What is the object of these remarks—to what do they tend? Surely to this, that while great, almost marvellous, results have followed the late advances and improvements in operative surgery, and which have been so carefully and so scientifically matured by many distinguished surgeons, there is still a wide field open for the investigation and improvement in the medical treatment of surgical disease; and that, on the whole, the strictly surgical and operative treatment has received more than its share of the attention due to disease, looking at it simply from a remedial point of view. I fear we must admit that the tendency of the present day is to eradicate disease rather than to cure it. In his lectures delivered at the Royal College of Surgeons, now many years ago, Mr. Hilton almost apologised for introducing the subject of physiological and mechanical rest as a branch of what he called natural therapeutics; and yet how much has surgery benefited by the principles he enunciated? He brought great anatomical knowledge and wide surgical experience to bear on this subject of rest, and seemed really to show that there were few surgical affections that were not capable of some relief, and many of cure, if the directions he gave were scientifically carried out.

"I mention this as an example of the direction in which scientific surgery may be advanced, and to suggest that if by therapeutics the pain of a cancer can be relieved, or a hip-joint saved, other means than the purely operative demand greater attention, and acquire greater importance than has been hitherto awarded them. Another bright example may be derived from the experiments lately carried on by M. Pasteur. It may, perhaps, be thought premature to accept his discovery with regard to the treatment of hydrophobia as a scientific fact, but even now the evidence in favour of the correctness of his views is very strong, and is not in opposition to doctrines already acknowledged. He deserves all praise for the patience, assiduity, and care with which he has laboured on this subject, and endeavoured to cure one of the most painful and fatal illnesses that come under the surgeon's care. Surely these examples may encourage us to attempt more in the medical treatment of surgical disease; to endeavour to discover the first deviation from the healthy condition; and to endeavour to find for such deviation some remedy that may arrest its further progress, and obviate the necessity for those operations that have justly helped to raise British surgery to its present high position.

"In making these remarks to this Association, I cannot but remember that I am addressing a body of gentlemen who are, like myself, largely engaged in general practice, and who have opportunities of watching disease from its onset to its close, in a way impossible for the pure surgeon or the specialist. Family peculiarities, family histories, family medical secrets are known to us, and in this way we have advantages for investigating, tracing, and treating disease, that we cannot be too eager to avail ourselves of. In fact, the general practititioner is the living embodiment of that principle I wish so strongly to establish—the necessary and close connexion between medicine and surgery, a principle nobly illustrated by many of our great provincial surgeons. Our practice comprises both medicine and surgery; our medical experience out of doors is brought to bear upon our patients in the surgical wards of our hospital. Chloroform has taken away from the value of the rapid and brilliant operation. He is the most successful surgeon who is also the best physician. Surgery should get more dependent on medicine for its help. Operative surgery, from the nature of things must have a limit, and surely that limit must be nearly reached. Let the medical aspect of surgery, then, command more of your interest and attention."

ABSTRACT OF

Address in Public Medicine,

Delivered before the British Medical Association, Wednesday, August 11th, 1886,

BY E. D. MAPOTHER, M.D.,

CONSULTING MEDICAL OFFICER TO THE CITY OF DUBLIN.

DR. MAPOTHER chose as his subject "The Medical Profession in Ireland and its Work." Referring to the Brehon code of laws, he stated that the most important of them, Senchus Mor, originated with St. Patrick; the provision in them most worthy of imitation at present was that the physicians sat in the Council of the State. They provided for distress—that is, for the support of a son taken from his mother's dead breast, and for the care of the sick and incurable. The unqualified physician was fined unless he gave notice that he was not qualified. In the sixteenth century it does not appear that the Irish were largely addicted to the use of intoxicating drinks, but in 1749, according to Dr. Rutty, there were in Dublin 3500 drink-shops in a population of about 150,000; at present among the humbler rural population alcoholic diseases are not frequent, but they are amongst the middle classes. A brief account was given of epidemic diseases which visited Ireland in past times. Ireland was spared from many mediæval plagues, on account of its insulated position, but typhus had its home in the country, and its ravages were such that during the year 1818 a million cases were recorded. During this year, Dr. Cheyne, Professor of Medicine in the School of the College of Surgeons, recorded the axilla and mouth temperature of 250 cases. At this time the profession held a high position owing to the distinguished men who practised in Dublin. It suffered heavily from typhus from 1818 to 1839, during which period 560 physicians had fever, and in 1847, 123 died from the disease. Cholera in 1866 did much mischief in Dublin, killing 923 persons; in 1867 there was a brief but fierce epidemic of cerebro-spinal meningitis. During the last six years the profession has suffered heavily in other respects; the landlords, who were formerly generous patients, have left Ireland, and the farmers and shopkeepers are becoming less able to pay fees; nevertheless, the number

of members of the profession is steadily increasing. An interesting *résumé* was then given of a paper read last year in the Academy of Medicine by Dr. Grimshaw, showing the condition of health of the Irish people. In rural districts, the average death-rate was 16·6, in urban districts 22·5 per 1000 living. The deaths from phthisis were 2·8 per 1000 among the civic and 1·6 amongst the rural population. Preventable ills in Dublin promote phthisis, but its low level and climate must also be blamed. The sick poor are better cared for in Ireland than in any other country, and this is due to the Medical Charities Act of 1851. The speaker entered in some detail into the Poor-law administration of the country, speaking of it in complimentary terms, and stating that provident dispensaries are unknown in Ireland, except in a few towns. The county hospitals were formerly a great disgrace to the country, but are now efficiently and economically managed. The clinical hospitals of Dublin are now the subject of investigation by a Government Commission. Ireland has only had a system of registration of deaths since 1864, although this system existed in England twenty years previously. Reference was made to the public medical services, and those of the army and navy were discussed at some length, and it was noted that the work of many Dublin chemists was inexact and untrustworthy. Veterinary surgery is not even taught in Ireland, and Dr. Mapother commented upon this in view of the interest of the Irish population in the production of horses and cattle. In conclusion, an account was given of the system of medical education in Dublin, and of the various licensing bodies.

ON A SPONGY FORMATION BETWEEN THE SCLEROTIC AND CHOROID COAT IN NEW-BORN CHILDREN.

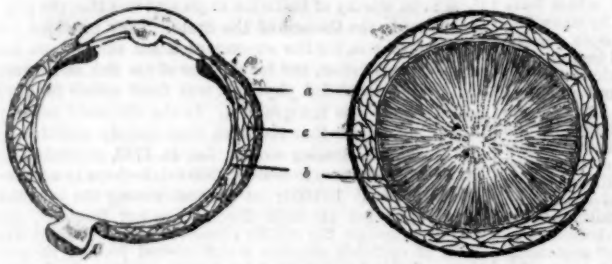
BY PROFESSOR ADOLPH HANNOVER, M.D.

AMONGST the great number of eyes of new-born children which I have examined, I have four times found a formation between the sclerotic and choroid, which, as far as I know, has not been noticed hitherto. I consider this formation to be spongy, on account of the structure it presented to view when the eyes were hardened in dilute chromic acid.

Eye of a child between one and two years of age, hardened in dilute chromic acid.

FIG. 1.
Longitudinal section.

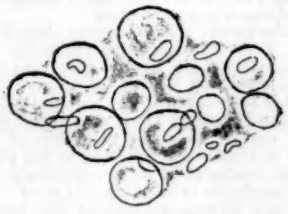
FIG. 2.
Transverse section.



a, Sclerotic. *b*, Choroid. *c*, Spongy substance between these two coats. Double size.

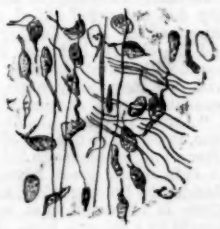
(See Figs. 1 and 2.) It consisted then of small areolæ, which were elongated, flat, generally parallel to the concavity of the eye, or irregular and angular like those of the spongy substance of the penis. In different subjects this layer between the sclerotic and choroid varied from 0·5 mm. to 1·5 mm.; it was thickest at the equator of the eye, and became thinner at the back part of the eye near the entrance of the optic nerve, and likewise at the fore part outside the corpus ciliare. The membranes which formed the framework were semi-transparent and firmly adherent to the sclerotic and choroid, so that they could not be removed without injury. Under the microscope they appeared as membranes of uniform transparent structure or covered with molecules; the lines on them were caused by folds. There was, besides, a great number of round or oval clear cells, with sharp linear contours, but without any contents (see Fig. 3); even the presence of a nucleus was doubtful, although there were many bodies of their appearance on the membranes, and some of them may have had

FIG. 3.



their place in the interior of the cells. There was no connective tissue; the cells may possibly have belonged to the lamina supra-choroidea. The circumstance that the formation was always found to have the same shape and extension in both the eyes of the child made it very probable that one and the same cause had prevailed in producing it. As such a one we may most likely presume an increased secretion of the serous or rather half-gelatinous substance, which under ordinary circumstances always exists between the sclerotic and the choroid of the new-born child. The adhesion of this half-gelatinous substance, wherein the ciliary nerves and vessels rest, is stronger with the sclerotic than with the choroid; it is stronger in the posterior part than in the anterior, and stronger in the inner than on the outer half of the eye.[1] When examined with the microscope, this substance is seen to be composed of a uniform basis without any structure, intermixed with a great number of oval, angular, or pointed nuclei of different size, from which also fibres may proceed. There seems, besides, to be a faint indication of connective tissue in bundles which cross each other, and of some elastic fibres, but these may belong to the lamina supra-choroidea. (See Fig. 4.)

FIG. 4.



When an eye of a new-born child is kept in dilute chromic acid for some days, the half-gelatinous substance becomes more like a fine membrane, but the microscopical relations remain the same as in the fresh state of the eyes. This spongy substance which I have mentioned has nothing to do with the lamina fusca on the inside of the sclerotica. The lamina fusca does not form a complete membrane, but consists only of bundles of connective tissue interwoven with irregular pigmentary cells, and connected with the lamina supra-choroidea by strings.

It is most convenient for the examination of the relations between the sclerotic and the choroid to wash off all the pigment from the inside of the latter, so that this coat appears almost white and without colour, except in the neighbourhood of the entrance of the optic nerve, where a light red-brown colour remains, especially extending outwards (tapetum?), caused by a brown sprinkling, but not by regular pigmentary cells. The posterior part of the choroid is not yet provided with pigment, but has only a light-brown colour—hence the reddish colour of the pupil in the new-born child. A transverse oval is formed with an excentric white spot for the entrance of the optic nerve. On the contrary, the place of the foramen cæcum is black,

[1] I have found exactly the same relation in the connective tissue between the sclerotic and choroid in the ox.

but not so dark as the rest of the choroid. The pigmentation proceeds both from the foramen cæcum and from the periphery of the oval, beginning in the foremost part of the eye and extending backwards.

The first eyes in which I discovered this formation were those of a child of between one and two years of age. The dimensions of each eye were as follows:—Vertical diameter 19 mm., transverse diameter 20 mm., antero-posterior diameter 18·5 mm. (the eyes were compressed from before backwards), diameter of the base of the cornea 10 mm. and 11·5 mm. All other parts of the eyes were perfectly normal, the radial structure of the vitreous body, like the structure of an orange, being very distinct. Nothing is known about the power of sight of the eyes.

When I had communicated the results of my observations, Dr. Paul Haensell of Paris suggested the opinion that the spongy layer between the sclerotic and the choroid might be due to an arrest of development. This hint may lead to further investigations of the eyes of the human fœtus at different ages before birth, kept for some time in dilute chromic acid in order to preserve the shape of the eyes and the possibly existing space between the sclerotic and the choroid.

Copenhagen.

ON A CASE OF CARDIAC DILATATION.

BY GRAHAM STEELL, M.D.,
ASSISTANT-PHYSICIAN TO THE MANCHESTER ROYAL INFIRMARY.

THE following case seems to me of sufficient interest to be recorded as furnishing a good example of a form of heart disease which, though comparatively rare, is important from the readiness with which, while yet in an early stage, it yields to treatment. It would seem to depend on failure of the muscle of the heart, whereby dilatation and mitral incompetence are induced. I have met with it most commonly in vigorous, muscular men below forty years of age. Most of its subjects have been exposed to the bad effects of alcoholic excess and undue strain thrown upon their heart by one cause or another; probably there is some congenital or acquired predisposition to the disease. In a fatal case lately under my care, in which the diagnosis was verified by post-mortem examination, the valves being quite normal in structure, no cause could be ascertained either during life or after death.

The diagnostic points of this form of cardiac dilatation are briefly as follows:—

1. The absence of a history of rheumatism.

2. Evidence of enlargement of the heart, affecting both sides, but especially the left ventricle, accompanied by extremely feeble cardiac impulse, the apex-beat (the impulse of the left ventricle) being especially weak and diffused.

3. An apex systolic murmur not carried backwards behind the mid-axillary line, accompanied usually by a first sound, which sound may be heard alone at the back and behind the line named.

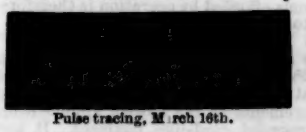
4. The ordinary circulatory phenomena of mitral disease of the heart, such as pulmonary congestion, enlarged liver, and anasarca spreading from below upwards, along with their respective symptoms, dyspnœa, &c.

The valvular lesion with which this variety of cardiac dilatation is most likely to be confused is mitral stenosis. Certain cases of mitral stenosis have no history of rheumatism, and present a systolic apex murmur having the attributes of the murmur described above, while there is no presystolic or diastolic murmur. Even in such cases, however, there are peculiarities which will prevent confusion with the cases of which the present is an example.

The restoration of the circulation on the recovery of the heart is strikingly illustrated by the accompanying sphygmograms, taken before and after treatment. As further evidence of the recovery of the heart in the same case may be mentioned the diuresis and the disappearance of the murmur, dyspnœa, and practically all symptoms. For the notes of the case and the sphygmograms I am indebted to Mr. Mumford, house-physician, Royal Infirmary.

H. S——, a baker, aged thirty-five, has been much exposed to changes in temperature, but has not suffered from rheumatic fever, rheumatism, or colds; he has never before had a day's illness that he can remember. He has indulged in beer, occasionally taking three or four pints a day, but generally not more than two; never takes spirits; no history of syphilis. His work necessitates carrying heavy sacks of flour up to 280 lb. in weight. Father very healthy, aged sixty; mother died of dropsy, apparently cardiac, as she suffered for six months from great dyspnœa, and had to be propped up in bed; she appears not to have suffered from rheumatism; brothers and sister healthy; the patient has a family of nine children, all living and well. On March 2nd, 1886, the patient went to his work as usual, but was unable to continue at it, on account of breathlessness and severe generalised pain all over the front of the chest on both sides, which prevented him from stooping. He endeavoured to continue his work on this and on the following day, but was obliged to go home and rest. The dyspnœa came on if he only walked slowly for twenty yards. He had severe cough and swelling of the legs and face. He remained at home, sitting up in the daytime, till March 15th, when he was admitted to the Manchester Royal Infirmary.

The patient's condition on admission may be briefly described as follows: He is a large, powerfully built man of pale complexion. He complains of pain in his chest and swelling of his feet. The ordinary signs of bronchitis distributed generally over the lungs are audible on examination of the chest. The cardiac dulness is increased and extends to the left of the nipple over an inch, while the apex-beat, although in its normal intercostal space, is displaced to the left of the mammary line and is very weak and ill-defined. A systolic murmur is heard at the apex and for some distance above the apex, being especially loud at a point midway between the nipple and left border of the sternum. The murmur is accompanied by a first sound possessing a peculiar clang. A pronounced difference between the pulmonary and aortic second sounds cannot be ascertained. There is no albumen in the urine. He was ordered the following mixture: Tincture of squill, one drachm; aromatic spirit of ammonia, one ounce; infusion of digitalis, six ounces; infusion of senega, to twelve ounces; one ounce to be taken three times a day.



Pulse tracing, March 16th.

March 24th.—Digitalis mixture stopped yesterday, and a mixture containing aromatic spirit of ammonia and infusion of senega substituted. Pulse 60. "The patient is a great deal

Pulse tracing, March 24th.

better, and the cough has almost entirely gone; the dropsy has almost disappeared, and there is no pain in the chest." The murmur has greatly diminished in intensity, and is only occasionally heard.

30th.—"The patient is much better, and gets up during a great part of the day. There is no dropsy, pain, or cough." A slight diminution of cardiac dulness seems perceptible. A tracing taken to-day presents similar characters to the last one, but the tidal wave is less pronounced.

April 6th.—No murmur is audible to-day, and the first sound has entirely lost its abnormal clang. The apex-beat is now well defined and of good strength. It is situated to the left of the mammary line in the fifth space. The patient has entirely lost his dyspnœa, pain, and dropsy.

The following quantities of urine were passed:—

	oz.		oz.
March 15th	10	March 25th	80
„ 16th	10 (?)	„ 26th	90
„ 17th	40	„ 27th	100
„ 18th	26	„ 28th	104
„ 19th	30	„ 29th	110
„ 20th	40	„ 30th	94
„ 21st	40	„ 31st	70
„ 22nd	30	April 1st...	80
„ 23rd	30*	„ 2nd	88
„ 24th	80	„ 3rd	64

* Digitalis stopped.

The patient on leaving the infirmary went to the Convalescent Hospital, and after a sojourn of a few weeks there,

again attended the infirmary as an out-patient for a considerable time. While under observation he remained well, although he did not resume the hard labour to which he had formerly been exposed.

A CASE OF

INTESTINAL OBSTRUCTION RELIEVED BY LIBERATING THE OMENTUM FROM AN OMENTAL HERNIA.

BY F. A. SOUTHAM, M.B. OXON., F.R.C.S.,

ASSISTANT-SURGEON TO THE MANCHESTER ROYAL INFIRMARY AND SURGEON TO THE CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.

A FEW years ago the question was discussed in the columns of THE LANCET by Mr. Holmes[1] and Mr. Rushton Parker[2] as to the reality of the occurrence of symptoms of strangulation in herniæ containing omentum only, and the cause of such symptoms when present.

Mr. Holmes is of opinion that strangulation of the omentum only may produce symptoms identical in kind with those of strangulated bowel, though probably not so severe, and suggests that the function of the intestine is suspended by some reflex action originating in the nerves of the strangulated omentum. Mr. Parker, on the other hand, believes that there can be no such thing as symptoms of intestinal obstruction brought about solely by constriction of omentum, and that when present they are due either to dragging of the omentum on the colon ("strangulation by kinking") or to peritonitis, whether resulting from inflamed omentum or otherwise. In other cases he suggests that possibly a small knuckle of strangulated bowel was reduced previous to operation, and the relief to the symptoms afforded by operation is therefore erroneously assigned to the reduction of the omentum alone. Mr. Treves, in his valuable work on Intestinal Obstruction (p. 29) has shown that when a portion of omentum has become adherent (as so often happens when it is involved in a hernial sac), it tends to become elongated, while the rolling movements of the bowels around it help to mould it into a rounded cord-like ligament. It seems not unlikely that an omental band of this kind may in some instances drag upon and produce kinking of the colon in the way Mr. Parker suggests, while in others it may strangulate or constrict some other portion of the intestine, just as frequently happens with other bands, and in this manner produce all the symptoms of complete obstruction.

In the following case, which recently came under my notice, well-marked symptoms of acute obstruction suddenly appeared in a person suffering from a purely omental hernia of long standing, without any evidences of congestion or inflammation being found in the hernia itself to account for them, and the symptoms were at once relieved on liberating the omentum from the hernial sac.

The patient was a female, fifty-two years of age, who for some time had suffered from a small irreducible femoral hernia, and had occasionally been under treatment for dyspepsia, colic, &c. About 3 A.M. on May 3rd, having gone to bed quite well, with the exception that for a few days the bowels had been somewhat constipated, she awoke with severe colicky pains in the abdomen, which were not relieved by an emetic administered by the patient herself, as had happened on several previous attacks of a similar nature. The same evening Mr. Gowland of Hulme saw her for the first time, and found her suffering from severe paroxysms of pain in the abdomen, which was distended, tympanitic, and somewhat tender. She was put on milk diet, morphia was administered every four hours, and turpentine stupes applied to the abdomen. The following evening severe sickness set in, and continued during the night. The next morning the vomiting was becoming stercoraceous. As there had been no action of the bowels for three days, a soap-and-water enema was administered; this was followed by the passage of some flatus and a few small particles of fæcal matter. As the symptoms continued unrelieved, Mr. Gowland suggested operative interference, and I saw the patient in consultation with him the same afternoon. She was then extremely collapsed; the pulse (130) was so weak and fluttering as to be almost imperceptible; the vomiting was distinctly fæcal; there was no marked distension of the abdomen, but severe pain was complained of in the umbilical region, with tenderness on pressure; beyond an indefinite fulness just above Poupart's ligament on the right, nothing abnormal could be detected in the abdomen. On the same side there was a femoral hernia the size of a walnut; it was not tender on pressure, but felt soft and irregular, evidently consisting of omentum, and being quite irreducible. Under the circumstances, as the symptoms of obstruction were so well marked, it was thought advisable to explore the hernia, for though it was clear that it was mainly omental, it appeared very probable that a small knuckle of bowel would be found tightly nipped at the neck of the sac. Herniotomy was accordingly performed. On opening the sac, a few drops of clear fluid escaped, and a small piece of indurated omentum, quite healthy and free from any signs of congestion or inflammation, was found in its interior. Its pedicle, which was about the size of a lead-pencil, completely filled the neck of the sac, to which it was fixed all round by old adhesions, there being no room left for any bowel to have made its way by the side of it. The adhesions having been broken down with the finger and a director, the pedicle was drawn down and surrounded high up with a catgut ligature, and, after the omentum had been removed on the distal side of the ligature, allowed to slip back into the abdominal cavity. The sac itself was then removed, its neck having been secured by another ligature. On recovering from the anæsthesia the patient at once expressed great relief from the operation, the abdominal pain having quite disappeared. There was no recurrence of the sickness, and henceforth all went well with the exception of a troublesome diarrhœa, which set in the following evening and continued for some days.

The sudden onset with the acute nature of the symptoms in this case, and their complete disappearance immediately the omentum was set free, point either to strangulation by kinking of the colon, or to constriction of some other portion of the bowel, probably of the small intestine, by an omental band, continuous with the pedicle of the portion of omentum present in the hernial sac.

Manchester.

[1] THE LANCET, vol. ii., 1883, p. 21. [2] Ibid., vol. ii., 1884, p. 211.

CASE OF CÆSAREAN SECTION IN COUNTRY PRACTICE; RECOVERY.

BY THOMPSON FORSTER, M.R.C.S., L.S.A.

ON May 16th, 1886, a man came to me at 10.30 P.M., stating that his wife was in labour and the midwife said there was something wrong, "the child was crossed." He was in great distress.

The patient, aged twenty-three, married, primipara, had been very delicate all her life, and subject to fits and very frequent sickness; she had been in labour during the whole of the 15th, and suffered severe pains on the 16th. The membranes ruptured at midday. She was in the following condition: Head presenting; os fully dilated, but the head had not in any way entered the pelvis; pelvis contracted; upper part of sacrum projecting. I considered it impossible to deliver the child entire. The cottage was so small, so badly ventilated, and the surroundings so unsatisfactory, that I decided to open the head, and endeavour to remove the child. I called in my friend, Mr. Johnson, who entirely agreed with me, and undertook to administer chloroform. Having opened the head, from which no blood flowed, I concluded the child was dead before commencing. Every effort was used to bring down the child's head, but without success. I could not introduce my hand. We agreed that delivery per vaginam was quite impossible. We then decided upon the Cæsarean section. I made the following arrangements: placed the woman across the bed, the nurse to take charge of the patient's hands, Mr. Johnson to see to the chloroform, one farthing candle on the bed and one on a chair with a basin of water and sponges, and one small petroleum lamp on a box with the instruments. I could not get further assistance, as the friends would not come into the room; if they had, they could not have moved. As soon as she was ready and well under the influence of chloroform, which she took freely, I made an incision through the skin and the peritoneum at the upper part, and passed two fingers

into the cavity as a guide, and extended the incision down to the pubis, about five inches. There was no more room. The uterus presented. I opened it freely, and the back of the child presented. With some difficulty I drew out the empty head, which I found the easiest, and removed the child, which weighed 9½ lb., and divided the cord. Then the placenta presented; this was removed easily, being free, and apparently floating in blood. As soon as it was removed blood poured out over everything. I then took hold of the fundus of the uterus with my left hand, and compressed the neck with my right. I then left the neck, as it was flabby and long, and the os very flabby, though the fundus was getting firmer, and began to sponge freely, still holding the fundus very firmly in the left hand. The bleeding slackened, but on removing my hand the blood flowed out as fast as ever. I applied the sponge freely, and then squeezed it out in cold water and pushed it into the uterus, holding the uterus with both hands. The bleeding then ceased. During the whole of this time the woman was vomiting violently, and forced down a large piece of omentum and some of the small intestines, which were violently projected through the wound. These were passed back steadily but very firmly, and held for a short time until the vomiting had slackened. I then carefully sponged out all the blood until the whole was quite dry and free from blood and water. The edges of the uterine wound were everted. I then perceived a faint odour of urine, so I examined the bladder, which was sound and almost empty. The vomiting began again a little, so I had to hold the intestines in with the back of my left hand whilst I passed in three deep sutures through the peritoneum of strong silver wire and twisted each one as I passed it, also twisting three small vessels. This was necessary because of some restlessness of the legs, which made it a little difficult. I then passed two shallow sutures of the same wire, and placed a piece of dry lint on the wound, and a thick pad of Strutt's absorbent cotton put on firmly, and a flannel bandage.[1] I found the bed so saturated with blood that I had to get a bag of straw that some children were sleeping upon in the room above, and removed the wet one and put the patient on this. I then put her on a man's old shirt, and covered her with two blankets; there were no sheets or other blankets at hand. I gave her a one-grain pill of capsicum and camphor, to be repeated every four hours, and left her in the care of her mother, the midwife going home. The difficulties having been all overcome by time and patience, I left the woman at about 4.30 A.M., comfortable as far as possible.

May 17th: Some pain. Passed urine freely; some bloody discharge with it. Pulse 120.—18th: Pulse 120; temperature 102·5°. Sweating very freely; to continue opium, and give beef-tea, milk-and-water, and barley-water as required. Dressings dry, excepting from the sweat, which saturated them; passed urine freely.—19th, 10 A.M.: Temperature 101·2°; fresh flannel bandage over the old one to tighten it; some flatulency; passed urine freely; back tender from the rough ticking and hard bed; abdomen tender; put a bag of powdered sulphur over the abdomen, and some over the bed and patient; to continue support; omit opium; some bloody discharge per vaginam.—20th, 10 A.M.: Pulse 120; temperature 102°; patient comfortable and very thirsty.—21st, 10 A.M.: Pulse 120; temperature 101°; patient comfortable.—23rd, 10 A.M.: Pulse 100; temperature 100°. Mother obliged to go for the day; bowels acted slightly.—25th, 10 A.M.: Pulse 110; temperature 102°; bowels irritable. Nurse removed some hard masses of fæcal matter, and then the bowels acted very freely.—7 P.M.: Very comfortable. Removed dressings and sutures; wound quite dry, and not even a pink blush, but apparently healed by first intention. Dressed with adhesive plaster and flannel bandage.—26th, 10 A.M.: Very comfortable. 7 P.M.: The nurse had gone home, as the mother came to say she could not stop, and must go home. There was some difficulty in getting a nurse. The patient cried all the afternoon. She had a fit of vomiting. Ordered brandy and one grain of opium every four hours. A drop of pus came from the suture hole.—27th: Temperature 104°. I dressed the wound, which had opened, I suppose, from the retching, and breathing quick and irritable. 7 P.M.: Delirious. Pulse 140; temperature 105°. Dressed the wound with sulphurous acid, 9 per cent., one part to four of water.—28th: Delirious all night. Sulphurous acid, twenty minims, 9 per cent., water one ounce, every three hours. Teeth dry; tongue dry; temperature 104°; frequent cough and expectoration.—29th: Temperature 102°. Bedsore on back. Cough and some diarrhœa.—31st: Temperature 105°. Diarrhœa severe. Lead and opium pill (five grains) every four hours. Some discharge per vaginam.

June 1st: Temperature 100°. Diarrhœa stopped. No medicine.—2nd: Removed to airy, comfortable lodgings. Since May 27th I have dressed the wound with sulphurous acid, 9 per cent., one part acid to four of water. Discharge very free, as of an ordinary period.—6th: Temperature 98·5°. Discharge very free. Ordered mutton chops and porter. There has been only four drops of pus during the whole time.—7th: Discharge ceased almost entirely. Wound healed. Gets up to night-stool, as the bedsore is so painful and large that she cannot use the bedpan. No ill effects.—18th: Walked home. Bedsore still large.—20th: Met the woman walking in the streets on her husband's arm, having returned to household duties.

Daventry.

[1] Sir Spencer Wells advised some years ago the necessity of dry sponging.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

STRICTURE OF THE ŒSOPHAGUS; GASTROSTOMY; RECOVERY.

(Under the care of Mr. RICHARD BARWELL.)

THE following case of gastrostomy, which was performed in the manner which now finds most general acceptance, at two operations, as recommended by Mr. Howse, will be read with interest. In it the stomach was not opened and food introduced until five days after it had been secured to the abdominal wall, when adhesion was firm. In cases of cancerous stricture of the œsophagus it is always a serious question as to whether gastrostomy should be performed or not, and if the operation be decided upon, as to the time for its performance. In a paper published not long ago by Dr. Hacher it is stated that Professor Billroth is of opinion that the operation should not be undertaken until the swallowing of fluids is quite impossible. This view would hardly meet with acceptance with British surgeons, most of whom are in favour of doing it at an earlier date, before the patient is so much reduced in strength by starvation as to make any operation of importance and risk to life, *a fortiori*, one in which the peritoneum is exposed and manipulated. The case which is appended, in which the operation was performed before complete obstruction had taken place, not only gave the patient great relief, but enabled her to return to her ordinary occupation, and has undoubtedly considerably prolonged life.

Eliza C——, aged forty-six, was admitted into the Golding ward on Feb. 3rd, 1886, on account of difficulty in swallowing, which necessitated many efforts, but still did not absolutely preclude deglutition. After thorough exploration of the chest, a bougie three-eighths of an inch in diameter was passed without difficulty for ten inches from the upper dental arch, but here decided resistance was encountered. Smaller and smaller instruments were gently used, and it was found that a No. 12 catheter could be got through the stricture without force. As there was no history of traumatism, it was evident that the stricture must be either syphilitic or malignant. No sign or history of the former could be found, nevertheless iodide of potassium was given, and its effects carefully watched. No instrumental treatment was deemed advisable, and the patient desired to be treated outside. She did not improve under the iodide, and in a fortnight it was discontinued. After another fortnight the difficulty of swallowing became greater, the efforts more painful, and she also began to lose flesh. Again, in another

fortnight she was evidently worse, had lost 14 lb. in weight during the past month. Her condition and the effect of gastrostomy were explained to her, and she urgently desired that the operation might be performed, in order to obviate the pain and trouble of attempting to swallow. She re-entered the hospital early in April, and on the 13th Mr. Barwell performed the first stage of gastrostomy, making an incision, three and a half inches long, three-quarters of an inch below the margin of the costal cartilages, commencing about the same distance from the middle line. The abdominal wall was opened through the fibres of the rectus, because it seemed desirable (the stricture being so low) to avoid going very near the cardiac end of the stomach. The viscus was found narrow and contracted, but it was easily drawn down with the fingers from behind the liver, and was sewn in two circles to the abdominal wall, the wound through which was then stitched. She was ordered to be fed per rectum.

April 18th.—No pyrexia of any kind or discomfort followed the operation; and at this date Mr. Barwell punctured the stomach at the opening with a tenotome and introduced slowly, so as to stretch the puncture, a glass tube with a conical end. An indiarubber tube was attached to this, and she was ordered to have two ounces of liquid food every three hours. Feeding per rectum to be continued.

24th.—The amount of food taken by the stomach has been gradually increased, the feeding per rectum diminished *pari passu*; it was at this date discontinued.

May 1st.—Patient takes food into the mouth and ejects it thence, after mastication, into the funnel connected with the indiarubber tube. Four days ago she was allowed to get up, was very comfortable save that some irritation around the wound resulted from a slight overflow of gastric juice.

12th.—Patient went out at her own request, being very comfortable.

July 24th.—During this month she has returned twice to report herself. She is well and gaining in flesh.

PRESBYTERIAN EYE AND EAR CHARITY HOSPITAL, BALTIMORE, U.S.A.

A CASE OF CATARACT.

(Under the care of Dr. JULIAN J. CHISOLM.)

D. S——, aged fifty-two, a finely developed man, in apparently perfect health, has a cataract fully formed in the left eye, and one also forming in the right. The left eye has been blind for two years. Light perception is good in this eye. He can get about readily by means of the right eye. The left lens was removed under the local action of a 4 per cent. solution of the muriate of cocaine. It was a mixed lens, with small nucleus and much cortical matter. When the pupil was cleared of lens detritus he counted fingers with this eye. The surface of the eye was carefully sponged with a solution of the biniodide of mercury, 1 part in 20,000. A few drops of a 1 per cent. solution of the sulphate of atropia was instilled into the eye and the lids then gently closed. A piece of isinglass plaster, that which is spread on silk, light in colour and therefore diaphanous, 2½ in. long and 1¼ in. wide, was dipped in water, and as soon as it became thoroughly pliant it was laid upon the closed lids, extending from the brow to the cheek. By the use of a rubber spoon this softened strap was thoroughly adjusted to all the irregularities of the lid surface, until it became an additional skin extending smoothly from canthus to canthus over the whole lid and contiguous surfaces. In a very few minutes evaporation dried it. It then stuck so firmly that there was no fear of displacement. The patient, with both eyes closed in this manner, went from the operating table and walked to his room, ascending often two flights of steps before reaching his bed. All the rooms of the hospital have blue shades covering the large windows, so that the light of the room is subdued; it is not so dark as to prevent reading. The hour for operating is from 2 to 4 P.M. The patient is put to bed, and allowed supper if he wishes it. No restrictions are placed upon diet; whatever he knows does not disagree is allowed to be eaten. No instructions are given as to movements. If the patient be restless at bedtime, a mixture of chloral and bromides is administered.

Second day.—The patient had some discomfort in the eye during the night, but not enough to prevent sleep. He had not taken the sleeping mixture, not needing it. The light of the room does not annoy him. It enables one to see that the plasters have not been disturbed. If there had been any watering it has evaporated, for the adhesive strips are dry. The eyes are perfectly comfortable. The patient had been up to stool, and suffered no inconvenience from it in the eye. As he seemed in every way well, no treatment was needed.

Third day.—He has had no trouble whatever. Has had a good night, and no pain at any time. One eye feels as comfortable as the other. No treatment necessary.

Fourth day.—The patient has had no discomfort during the last twenty-four hours. The adhesive straps are a little wrinkled at the lash border, apparently from some eye secretion. As there are no complaints, and as the straps on each eye are in a similar condition with no detachment of the straps, they are not disturbed. No treatment is ordered. A few drops of a 1 per cent. atropia solution are put at the inner canthus. It is seen to be drawn in under the adhesive strap in the line of the lashes, and is felt in the eye. Only a few drops of the atropia solution were used, not enough to wet the bandage, excepting the line indicated, and therefore not enough to disturb the adhesion of the plaster to the surface of the eyelids.

Fifth day.—He feels perfectly well in every way. Slept well, and has had no eye uneasiness. The adhesive plasters look moist at the palpebral split on each eye. There is every reason to believe that the corneal wound has perfectly healed, and that the plasters are no longer required. When removed the eyelashes were found a little gummy, and were cleansed with warm water. When both eyes are fully opened, they stand the light of the room equally well. There is no watering of either eye. Light does not seem in any way disagreeable. There is very little hyperæmia of the eye operated upon. A few drops of a 1 per cent. atropia solution are put in the eyes, and they are left in the moderate light of the room without protection.

Sixth day.—He has suffered no inconvenience from the removal of the adhesive straps. He is dressed, and is walking about his room with the hall-door opened. He feels well; says that his sight has grown stronger since yesterday. The eyes seem strong and show no photophobia or lacrymation. No treatment.

Seventh day.—The patient is doing well. A more thorough examination of the eye is to be made to-day. The shade was rolled up, allowing strong light to enter the room. The eye shows no discomfort from the exposure. The hyperæmia of the conjunctiva is very trivial. The pupil is large and clear, an evidence of no trouble whatever. After the examination the shade is drawn down again. A drop of atropia solution is instilled into the eye; the only treatment needed.

Eighth day.—Patient strolling about the halls, feeling no inconvenience from the light.

Ninth day.—The patient was found writing in a contiguous room. He faces the open window and looks out into the sunny street without discomfort, and feels quite ready to take care of himself.

Tenth day.—He sees well, and feels that he no longer needs the protection of hospital treatment. He is advised on going out to wear smoked glasses when out of doors, but not to wear them in the house; also not to expose himself needlessly to strong light.

Remarks by Dr. CHISOLM.—An item of much interest is found in the new method of dressing eyes after cataract extraction, and the manner of treating such cases in the Presbyterian Eye and Ear Hospital. It is directly at variance with the generally established and at present universally adopted method of using compressors, retentive bandages, cold water applications, dark rooms, and smoked shade glasses. The foundation for this new treatment is based upon the belief that as the cataractous eye is not annoyed by moderate light, the closed lids are a sufficient protective substitute when the lens is removed; and that when cataract extractions are treated with closed lids in light rooms neither lacrymation nor photophobia is produced, even when strong light is finally admitted. As to the retaining of the lips of the corneal wound in apposition, the best splint which can be found is the one which nature supplies, the stiff cartilage of the upper lid. The most equable support for this natural splint, and one which never becomes irregular, regardless of the movements of the patient, is the tonic action of the orbicular palpebral muscle. When the lids are kept closed by a piece of adhesive plaster, this muscle affords a constant and uniform support to the incised eyeball. The

results of this new departure, in the treatment of cataract extractions, are very striking. The comfort to both patients and attendants is readily recognised. Patients can be dismissed from professional care in about half the time that any other mode of treatment will admit; and the percentage of successes will be fully up to that now secured by the most cautious ophthalmic surgeons with the old methods in use. This method of dressing eyes follows naturally upon the use of cocaine or the local anæsthetic. The vomiting, so common after the administration of chloroform or ether, would render such a dressing inadmissible. After a cataract extraction both eyes are closed by adhesive strips. In iridectomies only the eye operated upon is dressed, in this manner the other remaining uncovered and unprotected. These cases need no longer to be considered bad cases, but are truly peripatetics.

When the cataract patient is put to bed, no restrictions are put upon his movements. He may roll about at his pleasure, as there is no head band to draw irregularly on the wounded eye. He sits up to his meals, and gets out of bed for calls of nature. After the second day he may leave the bed if he prefers to do so. The moderate light in the room permits friends to read to and amuse the patient during the week's confinement. Usually the first dressing, applied immediately after the operation, is removed on the fifth day. The eyes can be examined then, when very little injection will be seen. The eye operated upon stands this moderate light without any exhibition of lacrymation or photophobia. Two or three days afterwards even sunlight can be admitted into the room for examination purposes without annoyance and without smoked glasses.

Notices of Books.

Micro-organisms and Diseases: an Introduction to the Study of Specific Micro-organisms. By E. KLEIN, M.D., F.R.S. Third Edition. London: Macmillan and Co. 1886.—No better example of the interest taken in the prevailing pathological pursuit of the present day—the search after specific micro-organisms—could be cited than the rapidity with which Dr. Klein's admirable little work has reached its third edition. As a compendium of knowledge upon the subject, and for the most part a faithful guide in the researches requisite to establish the presence and characters of bacteria, it holds an established position. Opening with chapters upon the methods of examination and cultivation, the bulk of the volume is occupied with concise but clear and sufficiently detailed descriptions of the various forms, aided by a plenitude of engravings, which are nearly all from original drawings. The discussion of the relation of septic to pathogenic organisms, including a confutation of Buchner's views, and such subjects as vaccination and antiseptics, are reserved for the closing chapters, so that the author has succeeded within comparatively small compass in giving as full a survey of the subject as could be desired. Invaluable to the student, it is a book which deserves to be read by all who follow with interest the directions in which modern research is leading in the attempt to solve the great problems of etiology.

A Manual of Microscopical Technology. By Dr. CARL FRIEDLANDER. Translated from the Second Edition by STEPHEN YATES HOWELL, M.A., M.D. New York and London: G. P. Putnam's Sons. 1885.—This little work has met with so much approval at the hands of its author's compatriots that we are not surprised at an appearance of an English translation, which will, we imagine, be equally acceptable to histologists in this country and America. It is a thoroughly practical and reliable book, not by any means overburdened with detail, but conveying sufficiently precise instructions upon all the "modern methods" of staining and preparation which may be required in histological and pathological investigation. Although we cannot altogether congratulate the translator upon his share of the work, yet he has erred on the right side, and succeeded in presenting a very literal translation of the original. As to the subject matter of the book, the directions given for bacterial investigation are especially worthy of note, and we may commend to all would-be discoverers the wise remarks upon the necessity of comparing normal with morbid tissues before declaring their opinion as to the nature or extent of the latter, for there is no department more open to erroneous interpretation or responsible for more hasty and ill-considered speculation than that of microscopical research.

Sore-throat: its Nature, Varieties, and Treatment. By PROSSER JAMES, M.D. Fifth Edition. London: J. & A. Churchill. 1886.—The scope of this book is not sufficiently indicated in its title, for it embraces not only the inflammatory lesions of the pharynx and larynx, but other affections as well, including those of the trachea and bronchi, the thyroid and thymus, although it must be allowed that these last-named subjects receive but a minimum of description. The book, which has reached the dignity of a fifth edition, is written in plain language, and is thoroughly practical. It is therefore very suitable for the practitioner, who would hardly be able to devote the time requisite for the study of a more profound or elaborate treatise.

Traité Élémentaire d'Anatomie Médicale du Système Nerveux. Par CH. FÉRÉ. Paris: A. Delahaye et Lecrosnier. 1886.—No French neurologist is more fitted to write a medical anatomy of the nervous system than the author of this volume. The first section of the work is concerned with the central nervous system. The text does not merely describe the parts, but shows how they are altered by disease, and gives a general account of the pathology of the affections of the structure under discussion. This method relieves the usual monotony of mere descriptive anatomy, and effectually interests the reader. There are many illustrations of abnormal as well as normal structures.

The Asclepiad, No. 11, Vol. III.—The article on Alcoholic Asthenia is a very readable one, in the author's best vein, and showing strongly his excellent prejudices. The Skeleton in the National Cupboard is one more of those earnest appeals not to forget the foundations on which national existence and prosperity depend. Richard Wiseman and the Surgery of the Commonwealth (with portrait) is a most instructive biography. A very suggestive article is that entitled "Vis Medicatrix Naturæ," in which strong arguments are advanced against the favourite notion of the beneficence of Nature in restoring to health and harmonious working parts or organs in the physical economy which have become deranged by injury or disease. The section of Contemporary Practice and Literature shows a keen eye for the best. The popularity of Dr. Richardson's quarterly is now established beyond dispute.

Hospital Reports.

The Surgical Registrar of *University College Hospital* is again to be congratulated on the early appearance of his annual report of the surgical cases that have been under treatment during the year 1885. The completeness of these reports must be a source of gratification and of considerable utility to the members of the staff. The preface that Mr. Bilton Pollard writes to his report is remarkable, among other things, for its modesty. The labour to which the registrar has been put to produce such a report might well have found some mention in the preface, which is the customary repository of regrets at imperfections in the body of the work. All that Mr. Pollard says is: "The report for 1885 is similar in its general arrangement to that of 1884."

The fourteenth volume of the *St. Thomas's Hospital Reports* contains a large number of original articles by

members of the staff. Dr. Bristowe relates some interesting cases of Tubercle of the Cerebellum; Mr. Ballance, a case of Spasmodic Wry-neck treated by excision of a portion of the spinal accessory nerve; Mr. Clutton has an interesting paper on late Rickets; Dr. Hadden calls attention to some of the usually less conspicuous features of Chorea; Dr. Gulliver describes a case of Gangrene of the Lung consecutive to acute pneumonia; Mr. Shattock gives a notice of the more interesting additions made to the museum during the year. The medical report is signed by Dr. Hadden and the surgical by Mr. Battle.

New Inventions.

EXTENSION PULLEY.

THE accompanying illustration depicts an extension pulley which I have had made, and which is used at the Cork Children's Hospital, to the exclusion of nearly all the old extension arrangements. By means of the side screw

it is easily attachable to any ordinary bedstead, and can be raised or lowered at pleasure, so that a pull can be had from any direction. Messrs. Arnold and Sons, West Smithfield, have arranged to manufacture these pulleys.

NICHOLAS GRATTAN, F.R.C.S.E.,
Senior Surgeon, Cork Hospital for Women and Children.

THE TRAVELLING AND NURSERY CONVENIENCE.

THIS is undoubtedly a very useful contrivance, and will be welcomed by mothers and nurses when travelling with young children. Its chief recommendations appear to be—its great portability; the neatness of the case, effectually disguising the purpose for which it is intended; and the security with which the contents of the pan may be enclosed, being hermetically sealed by closure of the lid, which is provided with an elastic waterproof pad. The apparatus may be readily taken to pieces, to facilitate cleansing, and its cost is very moderate. The patentees are James Allen and Sons, 21 Marylebone-lane, W.

GUY'S HOSPITAL.—An excellent portrait of the late Dr. Alfred Swaine Taylor, F.R.S., the distinguished medical jurist, toxicologist and chemist, has been presented to Guy's Hospital by his son-in-law, Mr. F. Methold, with a request that it may be hung in the theatre in which the professor lectured for so many years.

UNIVERSITY COLLEGE, LONDON. — Sir William Roberts, M.D., F.R.S., Professor of Clinical Medicine in the Victoria University, Fellow of University College, has consented to preside at the annual dinner of the Faculty of Medicine, which will take place at the Freemasons' Tavern on Monday, October 4th. Tickets may be had of the Honorary Secretaries, Dr. Poore (30, Wimpole-street) and Mr. Stonham, F.R.C.S. (109, Gower-street).

ACTION AGAINST A LIVERPOOL DOCTOR.

CASEY *v.* IMLACH.

AT the Liverpool Assizes on the 6th inst., before Mr. Justice Cave and a special jury, an action was heard in which John Casey, a labourer, and his wife Mary were the plaintiffs, and Francis Imlach, M.D., one of the senior surgeons of the Hospital for Women, Shaw-street, Liverpool, was the defendant. The action was brought to recover damages from the defendant for performing improperly an operation upon the female plaintiff without her consent. The defendant in his pleadings denied the allegations made against him. Mr. French, Q.C., with him Mr. Walton, appeared for the plaintiffs, the defendant being represented by Mr. Bigham, Q.C., and Mr. W. H. Butler.

Mr. FRENCH, in opening the case, explained that the male plaintiff was formerly a sailor, but that he now worked on shore for Messrs. Singlehurst and Co., the owners of the Redcross line of steamers. The female plaintiff was married to him in 1874, and her complaint against the defendant was that he removed both her ovaries without her consent, without informing her what the result upon her after-life would be, and without there being any necessity for such an operation. By this operation he took away from her, at the age of thirty-nine years, a material portion of her genital organs, and left her incapable of conceiving. The operation was one not long known in surgery, and one which so seriously affected a woman that it was not had recourse to by surgeons except under circumstances of the gravest necessity in certain classes of disease for the purpose of saving human life. In the case of Mrs. Casey it was not an operation which any surgeon should have had recourse to, and if it had been, the fullest information should have been given to her of what her future life would be, so that herself, her husband, and her friends might form their own judgment as to whether the operation should be submitted to, or whether the woman would be prepared to run any risk there might be in continuing under medical treatment, and trust to that alone for restoration to health. Not one word was said to her as to the nature of the operation—that she was to be unsexed—no suggestion to her that the operation was so serious that her friends should be consulted, no intimation that the disease was one which, under medical treatment, with care, rest, and constant attention, could be dealt with, but an intimation that, under the penalty of being a dead woman within six months, the operation should be at once performed. As a result of the operation her bodily system was entirely altered, but the pains from which she had previously suffered disappeared. Her health and her bodily comfort were, however, in no degree improved; other pains of an equally serious character came on, and her health became worse than ever it was before. One painful circumstance in connexion with the case was that, according to his instructions, what medical men would expect to follow from an operation of this kind had actually occurred, and the result had been a change not only in her own life, but in the life of her husband. Under these circumstances the plaintiff claimed that she was entitled to be informed by the defendant not alone of the danger of the operation he was about to perform, but above all in her case, as a married woman, she was entitled to know what the after-effects would be upon her own life and the life of her husband. Dr. Imlach, a surgeon not of very long standing, had become very skilful in his profession. He had had great experience in surgical cases, and had performed this novel operation very frequently. The operation was one which had had not more than from twelve to fifteen years' existence in this country, and among the body of surgeons there was not any large number who practised it; but among those who did practise it there was, as he understood, a well-recognised rule that, looking to the gravity of the results as well as to the danger itself, it should not be had recourse to except in very grave cases. The complaint from which Mrs. Casey was suffering at the time, according even to the views of surgeons who strongly supported this novel invention in surgery, was not one in which the operation should be had recourse to. The defendant, as surgeon, made the usual entry in his note-book at the time of the operation, and described it as being for hæmatocele and hæmatosalpinx.

Mrs. CASEY, the plaintiff, was then called. She stated that in March, 1881, she first experienced some illness, from which she suffered afterwards, and she attended the dispensary of the Ladies' Charity and Lying-in Hospital in Myrtle-street, Liverpool, as an out-door patient. From April, 1881, to March, 1883, she was quite free from these pains. In April, 1883, she had another attack of the same pains, and she saw Dr. Utting, who told her she was suffering from inflammation of the bowels. He prescribed for her, and she became much better. She, in June, 1883, went to the Women's Hospital in Shaw-street and saw the defendant, who gave her medicine, which she took until August; and then she was well until the beginning of December, 1884, when she felt a similar pain in her abdomen, which continued for about half an hour. She went to the defendant on Dec. 8th and told him about this, and he then examined her. He told her she would have to undergo an operation, as she was suffering from inflammation outside the womb. On Dec. 15th she entered the hospital, and was operated upon on the 18th. She was never examined or seen by any other doctor, and was not told by him or anyone in the hospital what the result of the operation would be. On Dec. 31st she was taken home in a cab, and ten weeks afterwards she went to the defendant and complained of weakness. She also told him she had not been "unwell" (meaning that there had been no menstrual discharges), and the defendant replied, "No, you never will be; you have been 'unwell' too much;" and explained that the diseased parts he had removed were the cause of this. On Jan. 29th last she went to him to complain about the operation, having found out that he had removed her ovaries. She considered her health to have been worse since the operation than it was before, and between herself and her husband it had made a wonderful change. She had since been under Dr. Wallace of the Royal Infirmary.

Cross-examined by Mr. BIGHAM: She had been a hard-working woman until attacked by pains in the lower part of the abdomen, and had had five children—four of whom had died in childbirth and the other, born on Oct. 7th, 1878, was now alive. In 1879 she suffered from pains which she thought were not connected with her womb, but with her stomach, and she consulted Dr. Wilson at the Myrtle-street Hospital, who gave her some medicine which removed the pains. About March, 1881, she had a recurrence of pains in the lower portion of the abdomen when four months in pregnancy. She remained in good health until April, 1883, when she was treated by Dr. Utting's assistant for inflammation of the bowels. In May she began to become "unwell" too often. The menstrual discharge was about the usual quantity, and was accompanied by pain. In consequence of this she, in June, went to the hospital again, and was prescribed for by some medical man whom she believed was Dr. Davis. She then saw Dr. Imlach and remained under him from June to August, when the pain from which she occasionally suffered ceased. On Dec. 7th, 1884, the pains returned, though they were not so bad as previously. She went to Dr. Imlach at the hospital, which by this time had been removed to Shaw-street, who examined her on December 8th. She did not tell Dr. Imlach in 1883 that she was suffering from constant pain, or from frequent and unusual bleeding. She never told him she had had a flooding of three weeks, or that she had been to many doctors to get cured. He did not tell her on December 8th, when he examined her about the private parts, that she was suffering from some disease in that region. She understood him that she was suffering from internal inflammation. Dr. Imlach never mentioned the word ovaries, and she did not at that time know what they were. He did not tell her that the inflamed parts were connected with childbearing. She did not hear that her womb was displaced, but she understood that by the operation Dr. Imlach would bring down the womb and destroy the cause of inflammation.

Mr. BIGHAM: Did you form that opinion from anything he said, or was it your own opinion?—It was my own opinion.

Was Dr. Imlach kind to you before the operation?—Yes.

Kind and considerate?—I don't know; he was not very considerate when he took my ovaries away. (Laughter.) The nature of the operation was never discussed between me and the lady superintendent of the hospital or the nurses.

Did you, a married woman, know at that time what it meant if you were never to be "unwell" again?—I only knew that I could never have any more children.

Were you not told, amongst other things, that you never would be unwell again?—Never.

But if you had been told that, you would have known it meant never to have any more children?—If I had been told that, I should never have submitted to the operation.

Witness, continuing, said that when she was told by Dr. Imlach in March that with the operation she would never be "unwell" again, that was the first time she ever heard of such a thing. She first became acquainted with the fact that her ovaries had been removed in December last. She had told Dr. Imlach that she would have the law of him, but she did not tell him that she knew an attorney, and an individual would pay the expense. She had heard that Dr. Wallace was very eminent, and that was the reason she went to see him; but she did not hear that Dr. Wallace was taking a considerable part in the medical discussion regarding Dr. Imlach's operations.

JOHN CASEY, the husband of the previous witness, was called to state that he never heard of the serious operation to be performed on his wife, or he would never have consented to it.

The examination of JOHN WALLACE, M.D. Edin. and Professor of Midwifery at the Liverpool University College, was then read, he being too ill to attend. He stated that he had examined the plaintiff and read the note-books of Dr. Imlach, and she had explained her symptoms before operation to him. From what he knew of the case, such an operation as the removal of the ovaries ought not to be performed. He would not perform excision of the ovaries except in very extreme cases, and after very long observation. Assuming that the plaintiff saw the defendant from time to time, from May to August, 1883, and then not until Dec. 8th, 1884, and was only in hospital from Dec. 15th to the 18th, that was not, in his judgment, sufficient opportunity for observation to justify the operation. He should consider that the disease would be amenable to rest and medical treatment. Sterility followed the excision of the ovaries, and loss of sexual feeling, which might be kept up for a year, but after that declined. Hæmatocele and hæmatosalpinx did not produce sterility. The patient might be temporarily sterile while it lasted. In any such an operation as the removal of the ovaries the operation ought not to have been performed without explaining to the patient its nature. It was a well-known fact that it produced a masculine appearance; in an older woman the appearance was not so marked, but it made a young woman old before her time.

In cross-examination Dr. Wallace had stated that he should perform the operation of abdominal section only when continual hæmorrhage threatened life, with the object of tying the bleeding parts. He would perform excision of the ovaries when they were enlarged from cystic disease, for fibroid tumours of the ovary, or early cancer. Different men had different views as to when the operation was necessary. If there were salpingitis adhesions to the Fallopian tubes and ovaries, that would not justify the operation. If the patient had any pain or inconvenience that would make a difference, and it would then depend upon the time of life.

CHARLES STEEL, surgeon at the Women's Hospital in Shaw-street, was then called, and before he was sworn stated that he knew nothing of this particular case.

His LORDSHIP: That is not very material; we have a number of witnesses of that sort.

Mr. FRENCH: You mean you attend here on subpœna?—Yes.

Mr. STEEL was then sworn, and he stated that from Dr. Imlach's entry in his note-book that Mrs. Casey was suffering from hæmatocele and hæmatosalpinx, he did not think there would be sufficient disease to justify the excision of the ovaries. As to sexual desire, he could only speak within twelve months, as he had not made any other inquiry. Of the patients who have been operated upon in about twelve months, some say the feeling has not gone, others that it has.

In your acquaintance with hospital management, can you tell me whether in operations of this gravity there is not a custom as to the attendance of the senior medical officers—is it usual for the operating surgeon to have the benefit of the advice of the senior medical officers?—That is usually done.

Can you tell us in this case of Mrs. Casey whether there was any consultation between Dr. Imlach and any of the senior medical officers?—I did not receive notice; so that to my knowledge there was not.

In the case of hæmatocele, what would be the proper course of treatment in order to extract the blood?—As far as length of time is concerned, I should have the patient under my care some time before I operated, in order to try rest and medical attendance.

Had Dr. Imlach, in your judgment, sufficient time to watch the case, to try medical treatment, and to justify the operation?—I should take rather a longer time myself, but I cannot say as to this case.

Do you consider in this case there were sufficient grounds to justify the operation?—Not having seen the patient, I really cannot answer.

With the information now before you, and Dr. Imlach's note-book, what do you say?—Well, if I am to judge merely by that, I should not operate myself in such a case.

Before operating in a case of this kind what information, in your judgment, ought to be given to the patient as to the nature of the operation, and the subsequent effects of the operation upon herself?

Mr. BIGHAM: I submit that is a question for the jury.

Mr. FRENCH: I am quite content it should be so.

Cross-examined by Mr. BIGHAM: Whether you would perform an operation or not would depend upon an examination of the patient?—Yes. I have five times performed this operation of excision of the ovaries, and once made an exploratory operation, in which I performed the abdominal section, and did not remove the ovaries.

If you ascertained that the ovaries were sclerotic, and that the patient was suffering from salpingitis and intense pain, would you then think it was a proper case for operation?—I should not operate then under the circumstances.

But if the ovaries are sclerotic the woman, I suppose, is past childbearing?—Not exactly. It is very difficult to say. Very little is known about sclerotic ovaries.

If it had been ascertained that the ovaries had fallen down into Douglas's pouch, and that the uterus was displaced, would these two facts dispose you, in addition to the others, to think that the operation was a needful one?—That is the condition I found them in when I replaced them.

Do you think that it would be a proper thing, in a case of definite evidence of all these symptoms which had resisted known methods of treatment, to remove the ovaries?—I should be guided very much by the position of the case.

Re-examined by Mr. FRENCH: Is it not a matter of very great difficulty to diagnose whether the ovaries are sclerotic?—I should say very difficult.

The Court then adjourned until Saturday.

On Saturday morning, JAMES MOORE BENNETT, M.D. and surgeon, said he had been twenty-five years practising in Liverpool, to a considerable extent in connexion with diseases of women. He had had his attention called to the operation performed by Dr. Imlach, and he did not see anything that would render it necessary, without first using other means of treatment. In his opinion the defendant had not given sufficient time for medical treatment before having recourse to such an operation.

Mr. FRENCH: Are you able to say from your own experience in the profession whether diseases of this character are amenable to medical treatment?—They have been. I have treated a large number myself without having recourse to surgery.

How is the female affected by this operation?—It destroys the power of procreation, stops the menstrual discharge, and it is believed by a large number to leave the female unsexed.

Then I may take it, shortly, the effect is the same as the castration of a man?—Yes.

Is that answer based partly upon your scientific knowledge of the human body and partly upon inquiries and information you have had in the course of your practice from women themselves?—It is.

In your judgment, would the giving of information by an operator of the nature and consequence of an operation of this kind be likely to be injurious to the patient, or to render the operation more dangerous or difficult to the patient?—It would make her nervous.

His LORDSHIP: People have a right to know the nature of an operation, no matter what the immediate consequence may be.

Mr. FRENCH: You have heard that in Dr. Imlach's answers to interrogatories he says that in 1883 she complained of severe pelvic pain, irregular flooding, and so on. Does that change the judgment you have expressed in reference to this operation?—Somewhat.

In what does it show that the case was more difficult from his answer to his description in the note-book?—It shows the frequent pain and the continued hæmorrhage.

But even assuming this, what do you say as the time necessary for observation before operation?—I think the patient ought to have been longer under observation.

Cross-examined by Mr. BIGHAM: Assuming the symptoms to be such as my friend has just read to you, and they had been under observation for a considerable time, you don't think the operation would have been an unwise one?—Not for a considerable time.

What time do you consider sufficient?—I have seen some of these cases under observation for years. I should think Dr. Imlach had not sufficient time for observation, but a great deal would depend upon the result of a personal examination of the patient and upon the opinion a medical man would form after it. This operation is seldom necessary except in cases of tumour.

Do you think there are ever cases of sclerotic ovaries and salpingitis where this operation is necessary?—It is quite possible.

Would any information convey to another man the knowledge the doctor gets from an examination?—None.

Is it true that cases of sclerotic ovaries are peculiarly resistant to palliative remedies?—It has so been said.

And that is the opinion of many medical men?—Yes.

In a case of persistent salpingitis, is it true that with rest a patient may get well?—Yes.

Is it true that when the ends of the tubes are blocked removal is the only form of giving relief?—Not always; the blood may be absorbed. I have seen in the answers that a clot of blood was discovered in this case.

Is it a moot question amongst doctors as to whether this operation destroys sexual desire or not?—Yes.

Re-examined by Mr. FRENCH: Rule 39 of the hospital regulations provides that "No operation of a dangerous character shall be performed in the hospital without consultation between one of the medical officers for in-patients and one of the consulting medical officers and the operators." Is that in your judgment a prudent rule for a surgeon to follow?—Certainly.

Have you in your experience had cases with symptoms even more serious than this, upon Dr. Imlach's statement, which have yielded to medical treatment?—I have.

His LORDSHIP: Have you read anything in the note-books, in the answers to interrogatories, to make you think this operation on this woman was a proper one?—Nothing that would cause me to operate in a similar case.

In your judgment would delaying the operation have been injurious to the patient?—I should think not.

THOMAS FREDERICK GRIMSDALE, physician and surgeon, practising in Liverpool for the past thirty-nine years, said he attended upon his subpœna, and had not given proofs to either side. For many years his practice had been in connexion with female patients, and he was senior physician to the Women's Hospital in Shaw-street. During last year there were 111 operations of the kind in question performed, and in the previous year forty-four. Whilst he had the strongest possible objection to giving evidence on an abstract or suppositious case, he could say that the excision of both ovaries from a patient when, according to the defendant's note-book, she was suffering from hæmatocele and hæmatosalpinx, and her highest temperature was 100° and her lowest 97°, did not commend itself to his judgment.

Mr. FRENCH: Assuming treatment in 1881, recovery, good health until 1883, treatment in June and July, then health until December, 1884, one attendance on Dec. 8th, hospital on the 15th, operation on the 18th: in your judgment, was there a sufficient medical treatment or duration of time before having recourse to surgery?—If it was a case of hæmatocele, I should say it could not have been the same attack. They must have been distinct attacks.

Therefore, I may ask you, in December, 1884, ought there to have been a further considerable period of waiting and medical watching before having recourse to surgery?—Well, I draw the line at hæmatocele entirely.

You would not have it all?—Certainly not, from my experience. Hæmatocele and hæmatosalpinx combined would require a long medical watching before having recourse to surgery, and I should not have had recourse to surgery unless there was extra-uterine fœtus.

Assuming hæmatocele and hæmatosalpinx to exist, would you rely upon medical treatment, or have recourse to the knife?—I have had a great many cases in my life, and never had an idea of resorting to the knife. Of course, the

great majority were before this treatment was known, and a very great majority have got well under medical treatment alone. The operation does not commend itself to me at all. From the very great success that I have experienced, together with other medical men, the patient will recover from simple treatment, especially from prolonged rest. As far as I know, the operation has been less successful than the milder treatment of medical attention and rest. According to the last annual report the mortality in this hospital was about 33 per cent.

What judgment have you formed as to how women are affected by this operation as to sexual desire?—I have made some inquiries, and the result is that it varies very considerably. Probably in about half the cases there is no change whatever. In some the desire is impaired slightly; in others it is taken away altogether.

In your own practice, have you ever found it necessary to have recourse to this operation?—I have suggested it, but not in many cases.

Cross-examined by Dr. BIGHAM: Have you been present at any operations performed by Dr. Imlach?—A few.

You have heard the cross-examination of Dr. Bennett?—Yes.

Do you agree with him that in forming an opinion the most important thing is a personal examination of the patient?—Certainly. I think that a man gets a personal idea of the case by examination which he cannot communicate to another, and that is the reason why I object to give these *ex parte* statements without seeing the patient. I should doubt it to be possible that an experienced man could detect sclerotic ovaries by examination. I am now invited to these operations, but for about eighteen months I was not invited at all. I have been medical officer of the institution since it was opened two and a half or three years ago. There has been a good deal of discussion and difference of opinion about the necessity of these operations throughout the whole profession.

His LORDSHIP: We cannot have that opinion produced here. We must go by evidence.

Witness (continuing): I do not recognise the present operation at all. I was not invited until the beginning of this year.

Mr. BIGHAM: Do I understand you would recognise this operation of abdominal section and removal of the uterine appendages in any case?—Yes, in myoma, and if there be symptoms of pus in the tubes.

Dr. Imlach, in his answers to interrogatories, says that when the plaintiff first consulted him in 1883 she complained of severe and constant pelvic pain from which she had suffered for about five years, also frequent, prolonged, and exhausting hæmorrhage from the womb. When she was examined per vaginam, the womb was found to be retroverted, fixed to the sacrum, and very painful to the touch. The ovaries and Fallopian tubes were pressed down into Douglas's pouch; the ovaries seemed atrophied, and the Fallopian tubes could be felt to be thickened. Can you say whether the conditions there described are sufficient to justify the operation?—If they were just as there described, the operation would not have occurred to me.

Mr. ALEXANDER, late surgeon to the Brownlow-hill Workhouse Hospital, Liverpool, was called, to say that he had made over 3000 post-mortem examinations, and in only one female had he found hæmatocele.

Dr. BURTON, one of the medical men at the Women's Hospital, was called, but did not appear.

This closed the plaintiff's case.

Mr. BIGHAM, having briefly opened the case for the defence, called

FRANCIS IMLACH, the defendant, who said he was M.D. Edin., M.R.C.S., and one of the honorary acting medical officers for the Women's Hospital in Shaw-street, Liverpool. He graduated in February, 1872, and had both before that time and since devoted particular attention to diseases of women. He did not remember seeing Mary Casey before May, 1883, when the hospital was in Myrtle-street, and his note of that visit was "menorrhagia—three weeks." His impression was possibly there was a miscarriage; but this she denied, and he never found out anything to suppose that it was a miscarriage. Her complaint was as to this frequent hæmorrhage, which would come on almost at any time. She complained of a pain in the left side of the stomach low down, and he recommended her rest and good food. On Dec. 8th, 1884, she called at the institution in Shaw-street, and he examined her abdomen. There was some indefinite dulness where there should have been resonance; but it was not distinctly felt. It had no definite limitations in the pelvis. He examined her per vaginam, and the first thing he found was that the uterus was dragged out of place, down to the left, and was immovable. His fingers could feel the posterior portion of the uterus and the vaginal viscera. The plaintiff was a spare woman and a very good subject for examination. At that time he formed an opinion that the position of the uterus was due to contraction from previous inflammation of the left broad ligament, and partly due to adhesions of the uterus to the pelvic walls. When he operated he found this opinion wrong, for he found that adhesions of the tubes were the cause, and not contraction of the broad ligament. At this examination of Dec. 8th he could feel with his fingers into the space behind the uterus—Douglas's space. He could feel the Fallopian tubes behind and below the uterus, as if they were two solid limbs like two little fingers. There was a membrane between them and his fingers, but he could feel that they were thick. They were certainly not in a healthy state, from the fact that he could feel them in that place and in that condition. It was quite a difficult matter to diagnose sclerotic ovaries before operation. He could feel two little substances which from their relation to the tubes he was convinced were the ovaries. By pressing down the abdomen with one hand and working the fingers of the other, he could get to them, and he found they were hard and small. He wrote down at the subsequent examination that they were atrophied ovaries, but at this examination he wrote salpingitis, because he was surer of that than the sclerotic ovaries. There was no doubt about that. The womb was painful to the touch, and there was great tenderness. She told him she had been to any number of doctors since 1879. What impressed him very much was that she had told him she had been treated by a general practitioner for inflammation of the bowels, which made him rather suppose it might turn out to be, on examination, inflammation of the tubes and ovaries, which gave symptoms much like those arising from inflammation of the bowels. His examination indicated a serious state of the woman's health. It seemed to him there was great danger of her losing her life through the irregular loss of blood, and that nothing short of an operation was required. He told her the nature of the operation, that she would never have any more children after it, and that he was fully convinced she was then sterile. On Dec. 15th she entered the hospital, and on the 17th he again examined her, when the appearances were similar to those of ten days previously. In his abdominal note-book he made the entry: "Irregular menstruation for last five years; pain in the left hypogastrium, worse just after cessation of menstruation; habits doubtful, probably irregular; weak and miserable from constant pelvic pain and hæmorrhage. Condition of the uterus—dragged to the left by contraction of the broad ligament, also retroverted slightly; mobility restricted; length of cavity normal; ovaries atrophied." Before performing the operation, he had a consultation about her case with Dr. Lupton, one of the acting medical officers, who was suffering from spinal paralysis, and too ill to give an account of the matter. Present at the operation were the lady superintendent of the hospital, at least one nurse, and Dr. Davies, one of the acting medical officers. When he made an incision of the peritoneal cavity it was purple, showing that there was blood inside, and that he was right when he judged there was peritoneal hæmatocele. He opened up the peritoneum, put his fingers in, and drew out a blood clot that was free in the pelvic cavity. It was not one clot, but was composed of two or three, and was about the size of a small orange. He felt the uterus drawn down on the left side, and therefore turned up on the right. The ovaries were low down in Douglas s space, but he easily drew them up separately, and when he drew them out of the incision with his finger he found that he had also brought up the appendix vermiformis. It was not usual to find this appendix adhering to the fimbriated extremity of the right tube. The outer half of the right tube contained an old blood clot which, according to his recollection, was about the size of a cork, and was sticking out of the fimbriated extremity. At first he thought this clot was fæcal matter from the intestine; but, looking at it more carefully, it seemed to him to be a blood-clot ulcerating into the appendix vermiformis. He separated the right tube from the appendix, and care-

fully looked to see whether there was any perforation, and satisfied himself that there was. The right tube was thickened from chronic salpingitis, and there was also a dense blood-clot. The inflammation was so severe that it bled. Then he removed the ovary on that side. It was low down, very small, contracted, and hard, and he removed it, along with the tube that was thickened and inflamed. He felt for the left tube, and found that it was pulling the uterus down. It was thickened and dense and adhering to the pelvic walls. After separating the adhesions he drew it up to the surface outside the incision and found it a source of great danger to the woman. He removed it with the ovary. From what he saw of the ovaries he became certain they were sclerosed throughout. They were contracted like the hard kernel of a hazel nut. He was certain it was a case of hopeless sterility; it was the last stage of inflammation. The presence of the tubes was dangerous to the woman's life if left as they were. He had no reason to suppose that sclerotic ovaries were dangerous to life, but if they had been healthy and the tubes as he had described, there would have been no advantage in leaving the ovaries. Before he removed the ovaries he had formed an opinion that the operation was a proper one. In March following the plaintiff came to him, and he found menstruation had ceased and there was nothing abnormal.

Cross-examined by Mr. FRENCH: Did you consult anyone beside Dr. Lupton about this case?—No.

Did Dr. Lupton see the patient?—I cannot recollect, but my distinct impression is that he did not.

Don't you know that by a large body of practitioners this operation is looked upon with great disfavour, and don't you think it would have been better to get the advice of another doctor before operating?—Dr. Lupton had seen several cases like this before, and he agreed with me. He is perfectly familiar with my methods and with my accounts of the cases. My recollection is that he was to see the patient, but we had had a very heavy operation, and I was so exhausted, as the operator that we simply talked this case over.

Was this case so serious that it could not stand over for a few days to allow you to recover and consult with another medical officer?—I think the question of hæmorrhage made the matter an urgent one.

Urgent to one or two days?—No; I don't suggest that.

During the year 1885, how many castrating operations were performed in this Women's Hospital?—I don't think the term castrating is proper.

Then in how many cases were the uterine appendages removed?—I should say that a hundred was near the mark.

And in 1884, how many cases?—I think thirty or forty.

In how many cases during the last two years have you yourself operated for the removal of uterine appendages?—In many I removed both, but if I include where there was only one, nearly 135 cases. This includes my private as well as hospital practice.

In your practice at this hospital have you habitually had recourse to this operation for hæmatocele?—I have always operated in cases of intra-peritoneal hæmatocele where the symptoms have convinced me it was dangerous to life.

Did you tell Mrs. Casey to tell her husband of the nature and results of this operation?—I can't swear to any distinct conversation in which I should tell her to go home and acquaint her husband, but I have no doubt I should do. I can't remember on Dec. 15th, when she came back, inquiring whether she had consulted her husband or any of her friends, but should assume consent because she had been at home for a week.

Can you remember anything said by you to indicate that there was a risk of her losing the capacity for sexual desire by this operation?—I would not say that because it is contrary to my experience. I never met a case in which there was loss of desire. There is no relation between the sexual feeling and the ovaries that I have been able to discover. I advised the operation, and told her it was a removal of the parts that were diseased, which parts they were, and the consequences that would follow.

Have you made any attempt to have Dr. Lupton examined in this case with regard to your speaking to him about this examination?—No, I have not.

Did you know what Dr. Grimsdale's views with regard to the unwisdom of performing this operation were?—I don't think his views were definitely formed at that date.

Did you abstain from calling in Dr. Burton as a consultant because he was against performing the operation?—He is performing the same operation himself.

Cross-examined by Mr. BIGHAM: You have been told that the medical profession complained because you did not call in any other doctors in consultation. Did that relate to your practice at the hospital, or generally?—My practice at the hospital.

Have you been to see Dr. Lupton?—I have seen him often.

Have you tried to have a conversation with him on this subject?—No; but I have had conversations frequently with him to get him to recollect cases of consultation he had with him in 1885, and he has always shown he could not recollect, and he could not speak of medical matters.

Are there two kinds of hæmatocele—intra-peritoneal and extra-peritoneal?—Yes.

And this was intra-peritoneal—the most dangerous form of hæmatocele?—Yes.

LAWSON TAIT, F.R.C.S., and surgeon to the Birmingham Hospital for Women, said he performed the first operation for the removal of uterine appendages on Feb. 11th, 1872, and, including abdominal sections, he had operated about 1600 times. Intra-peritoneal hæmatocele was very distinct from extra-peritoneal and was fatal in 96 per cent. of the cases if left long. In the great majority of cases it was fatal in three hours, and the longest time he had known before it was fatal in one attack was forty-eight hours. He had heard the evidence of Dr. Imlach, and from his description of the case he could say that the operation was a most proper one.

Mr. BIGHAM.—You have heard his diagnosis before the operation, what does that indicate as to the sterility of the patient?—There can be no doubt that the woman was completely sterile before the operation. His account of the operation itself confirms the diagnosis.

From your experience what effect has this operation upon the sexual desire?—In no case that I have ever asked the question have I found it destroy the sexual appetite at all, and in very many cases where the disease destroyed it the operation has restored it. Chronic salpingitis with adhesions apart from or connected with hæmatocele would be a proper case for operation if the symptoms were severe enough. From the plaintiff's own description of the symptoms, I should say that is a case of recurring intra-peritoneal hæmatocele. She described the case exactly.

His LORDSHIP: You say the longest period before death you have known has been forty-eight hours; but here you have a woman who has three previous attacks, none of them fatal?—I know of no case like this; it is unique.

Mr. BIGHAM.—From the diagnosis you have heard of Dec. 8th and 17th, would there have been any danger in leaving the case longer?—I say Yes; because the amount of blood found at the time of the operation was very considerable, and if the bleeding had been going on the patient would certainly have died. It most certainly was an urgent case according to the amount of blood.

His LORDSHIP: In the case of intra-peritoneal effusion how is the blood got rid of?—A great majority die of the hæmorrhage.

Cross-examined by Mr. FRENCH.—Before this action was brought was there a discussion amongst medical men on this question in which you took part? Was there a printed discussion between you and Liverpool doctors with regard to Dr. Imlach and his system of treatment at this hospital in Shaw-street?—There were several letters published in medical journals.

There is a letter of yours in the *Medical Press* of March 3rd, and I will read to you a passage: "I assumed, of course, in my previous discussion of this matter in your columns that Dr. Imlach was actuated by principles similar to those which I myself had adopted. I am not yet prepared to say he is actuated by others, but I am bound to say that after reading the discussion in your columns to-day, and still more after reading the paper by Dr. Imlach himself in the *British Medical Journal* of last Saturday, I think he has departed from those principles. He certainly has gone a great deal further than I think can be justified in the removal of appendages for hæmatocele; but I want to guard against condemning Dr. Imlach, because, after all, it may be proved that he is on the right side of the question. At present I do not think so." Can you now point out anything in the course of this case to make you change the opinion you expressed in this letter?—The opinion expressed there is very simply explained. It arose from a want of precision in Dr. Imlach's description of the two kinds of hæmatocele, and I assumed,

perhaps too hastily, that he removed the appendages for extra-peritoneal hæmatocele. I afterwards found that this assumption was not correct. In intra-peritoneal hæmatocele surgical operation is absolutely demanded, and immediately.

Can you explain why Dr. Grimsdale has not had occasion to remove the ovaries?—I can point to a large number of cases which have passed through Dr. Grimsdale's hands, which have come to me for operation, and the explanation is that he has not followed the advances made so as to recognise the value of the operation.

On December 8th, if there had been a diagnosis of intra-peritoneal hæmatocele, what decision would you have come to?—I should have operated upon the 8th or 9th.

Then that would have been really a case of urgency?—I should have regarded it as such.

Did you hear Dr. Imlach this morning say that even on the 18th there was no such urgency, but that he could wait a day, or even two or three?—That would depend upon the condition of the plaintiff, about which I can form no opinion.

Have you known medical treatment tried to save a patient's life for intra-peritoneal hæmatocele?—I have, and known it always to fail.

Do you assume, then, that in cases of hæmatocele successfully treated there was no intra-peritoneal hæmatocele?—I can make no such assumption; I can only speak of my own practice.

Mr. BIGHAM: Quite irrespective of hæmatocele, do you think from the description of the salpingitis and pain there was quite sufficient to justify the operation that was performed?—Yes.

JAMES AVELING, M.D., senior physician of the Chelsea Hospital for Women, gave evidence that from the descriptions given the operation was a proper one. The exploratory incision was warranted by the symptoms, and then, having regard to the discovery made afterwards, the removal of the uterine appendages was proper. There were two things which he thought justified the operation: one was the inflamed condition of the tubes, and the other the small and hardened ovaries. He believed the removal of the ovaries had no detrimental effects as regarded sexual desire. In the case of eunuchs the sexual desire was not removed.

Cross-examined by Mr. FRENCH: He did not attach much importance to what was called intra-peritoneal hæmatocele. He believed it existed in this case, but did not think it of so much importance as the other things he mentioned.

His LORDSHIP: Would you perform this operation where there was nothing more than a sclerotic condition of the ovaries?—I have done so; it makes life miserable.

If there is pain after an absence of eighteen months, is it necessary to cut out the ovaries?—Certainly not.

THOMAS SAVAGE, F.R.C.S., surgeon to the Birmingham Hospital for Women, deposed that the operation was a proper one under the circumstances, and that Dr. Imlach had plenty of opportunity of ascertaining the condition of the patient. In a large number of cases the operation did not interfere with sexual desire, and in others it increased it.

By His LORDSHIP: He was quite prepared to say that in this case recovery by medical treatment was impossible. Temporary recovery was not probable. Although nature had succeeded three times in effecting a recovery, he did not think it would have been the slightest use giving nature a chance again, as every time the pain occurred the woman was on the brink of a precipice.

JAMES GREIG SMITH, surgeon at the Bristol Royal Infirmary; Mr. Sinclair, physician for the diseases of women at the Southern Hospital, Manchester; Nicholas Kendrick Marsh, surgeon, Liverpool; James Muir Howie, M.B., Liverpool; Andrew Stewart, L.R.C.P. and L.R.C.S. Edin., Birkenhead, also stated that the operation was a proper and necessary one.

Dr. DAVIES, one of the honorary assistant medical officers at the hospital in Shaw-street, Liverpool, said he attended nearly all the operations at the hospital, and he gave ether to the patient in this case. He had no distinct recollection of the operation. He had not known a single case of the removal of uterine appendages which he disapproved of, and had never known of the removal of healthy ovaries except in the case of fibroid and solid tumours. From Dr. Imlach's description this was a case for surgical treatment; medicine would have been no use at all. It was a case for prompt operation, as she was liable to recurring attacks of hæmatocele, which was a danger to life.

Cross-examined by Mr. FRENCH: Do you at this hospital draw a distinction between intra- and extra-peritoneal hæmatocele?—I have not yet seen a case of extra-peritoneal hæmatocele.

Miss Carless, lady superintendent of the hospital, and Miss White, formerly nurse, deposed to telling the plaintiff what the result of the operation would be. Miss White stated that she told Mrs. Casey that she would never be "unwell" again, and the reply was "a good thing too," or words to that effect.

This closed the evidence for the defence, and his Lordship was about to adjourn until Monday, when the jury intimated that they had made up their minds about the case, and were ready with a verdict.

Counsel in the case agreed to accept the decision of the jury, who then returned a verdict for the defendant.

On the application of Mr. Bigham, his Lordship certified for a special jury.

SURGICAL CASES.

To the Editor of THE LANCET.

SIR,—Permit me to offer a few observations on some surgical cases published in your journal.

1. *Delayed union of lower jaw after division in Sédillot's operation.*—The writer of the editorial preface to my two cases of Sédillot's operation for the removal of the entire tongue and floor of the mouth missed a fact recorded in the first case, which would have substantiated his surmise that bony union of the jaw was only delayed in these cases. It was mentioned at the end of the account of Case 1. That when the patient was seen, six months after the operation and three months after leaving the hospital with a movable symphysis, the jaw was quite firm; in other words, bony union had then occurred, as a result of greatly improved general health and condition from residence in the country. This result renders it probable that bony union will be found to have taken place when the second case comes under observation, after a corresponding interval of time. The possibility of the halves of the divided jaw not uniting by bone is not touched upon in surgical works of established authority, nor is anything said about delayed union in cases published in medical journals. The point, however, is evidently important, for Sédillot's operation affords by far the freest access to the tongue and the adjacent structures of any of the ordinary operations on the tongue, and I do not think that it is a whit more dangerous than clipping out the tongue with scissors. Your comment may serve to direct attention to a neglected detail.

2. *Mr. Thomas Smith's successful case of supra-pubic lithotomy for a stone weighing 24½ oz.*—Whilst cordially congratulating Mr. Smith on the successful issue of this interesting case, I may be allowed to point out that it is doubtful whether the stone is the *largest* that has been extracted during life, nor is it even the *heaviest*. If Mr. Smith will refer to THE LANCET of Jan. 16th last he will find that Dr. W. B. Hunter of Londonderry reports a case of calculus weighing 25 oz. removed by Joseph Hunter, L.M.S., from a native in the Madras Presidency. The patient lived three days. Then there is Uytterhoeven's calculus measuring 16½ in. by 12½ in. in circumference. Moreover, the calculus which I was obliged to remove piecemeal from a pouch was *larger* but not so heavy, for it measured 13 in. by 10 in. in circumference. The extra *weight* of Mr. Smith's calculus appears to have been due to its centre of oxalates. He had the advantage of a patient only forty-three years of age, and of a calculus free in the cavity of the bladder; and I feel convinced that, if the latter had been the condition in my own case, a permanent recovery would have ensued. It is not my wish to detract one iota from the merit of Mr. Thomas Smith's operation, but merely to temper his not quite accurate superlatives.

3. *Strangulated umbilical hernia.*—In THE LANCET of Oct. 24th, 1885, I reported some cases of strangulated hernia treated by removal of the sac and omentum, and amongst them a case of strangulated umbilical hernia in a patient aged seventy. The account broke off on the fourth day after operation. The patient went on as well as possible, the wound healed, and she recovered completely. Further experience of this method of dealing with the sac and omentum has strengthened my opinion of its superiority over the mere relief of the stricture, which was all that was aimed at in the old operation.—Yours faithfully,

August, 1886. WALTER RIVINGTON.

THE LANCET.

LONDON: SATURDAY, AUGUST 14, 1886.

A CASE of considerable importance was tried last week at Liverpool before Mr. Justice CAVE and a special jury. It was a case in which an action was brought against Dr. IMLACH to recover damages for improperly performing an operation known as ovariotomy without giving the patient any intimation of the nature or result of such operation. Mrs. CASEY, the person operated upon, was forty years of age, had borne five children, and had enjoyed fair health up to the time of the operation in December, 1884. In March, 1881, she began to suffer some pain in the lower part of the abdomen, for which she was treated and cured. She suffered no pain thereafter until April, 1883. She then had another attack, and was again cured. In December, 1884, the pain returned, she became an in-patient at the Hospital for Women, Liverpool, and Dr. IMLACH performed "ovariotomy" upon her. Although the operation is described as ovariotomy, yet it is clear from the context that the operation was not what is usually termed ovariotomy, but oöphorectomy, BATTEY'S operation, or spaying. It is said to have been done for hæmatocele and hæmatosalpinx. At the end of the evidence for the defendant, the jury returned a verdict for the defendant without hearing counsel or judge. Dr. IMLACH is thus to be congratulated on the result of the case.

A court of law is not the place to elucidate scientific questions. Its methods are not adapted for such a purpose, but for the trial of narrow issues. Scientific evidence when given in court is cramped, one-sided, and often misleading, and necessarily so from the methods employed to obtain it. The gentlemen learned in the law, as well as the scientific witnesses, are not free to obtain or to give evidence, except on the narrow issue under consideration. Evidence which is regarded as unsuitable by either one side or by both sides may be omitted. The interest of this trial lies, however, far less in the narrow issue which the jury had to deal with than in the broad question whether the frequent and almost indiscriminate spaying of women suffering from diseases which are not fatal, and which are often only trivial, is justifiable. This great question was not touched upon, and indeed it is one not suited to be placed before a jury so long as the methods of the courts are such as they are at present.

Some astonishing statements were made in the witness-box—statements which are utterly at variance with the present state of knowledge of the subject. Mr. LAWSON TAIT stated that intra-peritoneal hæmatocele was fatal in 95 per cent. of cases, if left long enough, and in the majority of cases it was fatal in three hours if not operated upon. The judge interposed here, and said, "This woman had three previous attacks, and none of them were fatal, although treated medicinally and not surgically." Mr. TAIT, however, replied, "This is a case that is unique, and I have seen none like it." We can hardly understand his statement that 95 per cent. of cases of intra-peritoneal hæmatocele prove fatal, and that Mrs. CASEY'S case is unique. It is true that when the rupture of the sac of an extra-uterine pregnancy gives rise to hæmatocele, the condition is dangerous and fatal, but such rupture is not among the common causes of hæmatocele. Intra-peritoneal hæmatocele is a condition frequently met with; extra-uterine pregnancy is comparatively rare. Recurring intra-uterine hæmatocele, like the case of Mrs. CASEY, is not very rare, and it very rarely proves fatal; its tendency is to recovery. The danger accompanying it, however great it may be in theory, can be truly measured only by the results obtained by medicinal treatment. Measured in this way the danger is extremely small. There are not more than two or three institutions in the kingdom, and not one general hospital, in which it is the rule to treat intra-peritoneal hæmatocele by abdominal section.

In the evidence of Dr. GRIMSDALE, which was of a highly scientific character, one fact very important was stated—namely, that in the Liverpool Hospital for Women, 111 women were spayed during the past year, and 44 during the previous year.

The highest authorities in this country have justly condemned the frequent performance of spaying, and it is well known that such practice is limited to one or two towns in the kingdom. In America the operation has been performed with great frequency, but there pathologists and physicians have begun to question the frequency of disease of the uterine appendages calling for their removal; and they assert that ovaries are removed and called cystic, which are in reality typically healthy organs. That there are certain cases in which the operation is justifiable and called for cannot be denied; but the idea that such cases are common is entirely erroneous.

THE State of Medicine in the United States and of State Law as it affects Medicine, as a science and as a profession, are subjects of immense interest. Dr. BILLINGS' remarks on them, constituting the Address in Medicine of the British Medical Association, in lieu of that which was to have been delivered by the lamented Dr. FLINT, may be too long to be overtaken in a day by every reader of it. But it will well repay study. The subjects are of interest to us in more ways than one. The Americans are not the men to stand still in medicine, any more than in any other practical art. Already they have given us fair notice of sharp competition. In medicine proper, in surgery, in gynæcology, in midwifery, they more than hold their own. They come to Europe and are thankful and respectful learners in London, Paris, Berlin, and Vienna. But there is nothing in their respect which forbids them going beyond their teachers, or becoming teachers of us in their turn. In anæsthetics, in abdominal surgery, in lithotrity, in therapeutics they have had men of "light and leading," and fortunately have them still. This is one reason why Dr. BILLINGS' Address should be carefully considered, in spite of its somewhat undue length. Another reason is that under the new Medical Act we shall have to come to some very definite understanding with our brethren as to the value of their diplomas. We shall soon be asked to recognise some of them. Which? That is the question. It is therefore kind as well as opportune for Dr. BILLINGS to come amongst us and lay before us

frankly the state of the law, or the lawlessness of the States, in the matter of medical education and of medical diplomas.

Dr. BILLINGS is very candid. He tells us frankly that in his country there is great popular tolerance of, if not sympathy with, irregular and heterodox forms of medicine, and that the Medical Schools are so numerous and the examinations so defective, that when real sound tests are applied 70 or 80 per cent. of those tested are found wanting. It is not a little curious that the deficiencies of medical schools and medical Bodies in the United States have been made manifest exactly in the same way as they were brought to light here. The first effective demonstration of the imperfections of our examining system and of the education which preceded it was given by Dr. PARKES, who based his criticism on the experience of the special examinations for candidates for medical service in the Army and Navy. But for these we should never have obtained the great improvements already achieved, or the public inquiry leading to recent legislation. The Army and Navy Medical Boards in the United States have done an exactly similar service. They examine those already in possession of diplomas; their examinations are the most rigid tests of qualification in the States. And what is the result? Of the candidates who apply from 70 to 80 per cent. are rejected. Our own Army and Navy Boards now reject a very small proportion. This may partly be due to the fact that only the better class of students now venture to apply for these appointments. But it is largely because our Examining Boards, under the pressure of outside criticism, are really much more careful in their work and in the curriculum which they require to be observed by students. In this country the examining boards are by law made absolute judges of competency. Public opinion will back them in any reasonable and fair severity in the work of examination. In the States it is not so. Public opinion does not demand very strict or scientific tests of medical knowledge. In many States the law requires that on the examining boards there shall be a certain proportion of homœopathic and eclectic practitioners, and in the States generally there is little complaint—except from medical men—of that loose state of the law which allows charlatans and herbalists to vaunt their remedies, and the school examinations to be so loose that from 70 to 80 per cent. have to be rejected by the Army and Navy Medical Department. There is one other huge evil in the United States—the large number of schools, amounting to over eighty. These compete keenly with each other for students. They are not exacting in regard to preliminary education; their curriculum is short; their examinations are easy. Hence it happens that the profession is overcrowded and, consequently, less highly esteemed. There is a medical man to every 589 of the population, or about twice as many as in England. It is a serious thing when eighty bodies have an interest in drawing students and supplying them with diplomas. The very bodies that should protect the public are tempted to betray it and to flood the country with men whose incompetence may not appear in statistics, but must have terrible consequences in individual cases. We probably misapprehend Dr. BILLINGS, but if not, we must venture to differ from him in thinking that a practitioner may be good enough for one part of the country and not for another: good enough for a rural or malarious district, but not for an urban or a wealthy one. Quackery has at least one use—that of a foil to set off true and wise practice; but examining authorities should be strict. There will be quackery and incompetence enough, without any laxness on their part. It is not their function to ask how a sufficiently educated man is to be maintained; that is his look out. Their duty is to see that none but such men acquire diplomas. We must hope for another opportunity to notice other subjects of great interest in Dr. BILLINGS' Address.

IT is not a politic proceeding to visit a health-resort without previously ascertaining that it is really healthy. A moment's reflection must convince anyone that the fact of any particular place having a high reputation for its hygienic qualities is certain to expose its inhabitants and those who visit the locality to special risks. The convalescent from maladies of all classes, and more especially the "catching" diseases, always seek "change of air," and they are pretty sure to go, or be taken, to places, probably by the seaside, which are renowned for their restorative properties. Practically, therefore, just as a district naturally free from phthisical affections is sure to be crowded with the victims of lung disease, so a healthful locality is likely to be frequented by the unhealthy. There is no help for this, and the fact must be faced; but in so far as infectious or contagious diseases are concerned, there ought to be special measures taken to protect visitors to places of general resort for health purposes from the needless peril of unsuspected morbid poisons.

It is idle to rail against the lodging-house keepers as though they were greater offenders than others. As a matter of fact, it is the visitors who are most to blame. Does good and careful Paterfamilias, or the fond mother of the child, go frankly to the keeper of a lodging-house and say, "My little boy has just had an infectious disease, and I am bringing him to your house to get rid of the infection?" Certainly not. The parents are particularly careful not to mention the fact that the illness has been infectious or contagious. The servants are cautioned not to divulge the truth; and because human nature is selfish for its own interests and those of its immediate belongings, the health of subsequent visitors to the lodging-house in which the sick boy is located is disregarded. This is what happens frequently; and in the face of such occurrences it is unjust, we say, to blame the lodging-house keepers. They are only responsible for not divulging a fact which has been carefully kept from them, or which, if they know it, has been discovered accidentally. When a subsequent case occurs in the house, of course the lodging-house keeper *ought* to set aside personal interest, and starve rather than take in new lodgers, or at least disinfect his house; at the risk of his rival neighbours ascertaining the facts and publishing them to his disadvantage. All this he ought most certainly to do; but with the bad example set for him by his first lodger, it is not unlikely that he may leave the right and proper thing undone. Someone has said that sanitation is an affair of the individual; and it is simply true that if any serviceable reform is to be carried out, it must be accomplished by personal effort rather than by law-making, which generally means law-breaking, or, at best, law-evading.

There can be no question as to the expediency of making

it obligatory, in a legal sense, to notify the existence of *any* infectious or contagious disease to the local medical officer or to the sanitary authority of the district. This ought to be done without delay everywhere; but when so much has been accomplished, there will remain the real *crux* of the difficulty untouched. When a case of infectious disease is developed, the mischief of propagation has generally been some time in operation. To grapple with the evil at close quarters we need to give the lodging-house keeper a remedy against the person who brought disease into his house. When a case of infectious disease occurs, it should not be simply a question of reporting the existence of the disease, but of determining whence it came and who was the introducer. If it were made the duty of the medical officer of health to investigate the manner in which the disease had been contracted, and if the conclusions at which that official arrived were available as evidence in support of a claim to damages on the part of the lodging-house keeper, there would soon be an end of the cowardly practice of sending the infected, or probably infected, members of a family to a health-resort without the smallest care or precaution; and lodging-house keepers, having a prospect of compensation, would not hesitate to report the existence of infectious disease in their houses unless they were really themselves at fault, in which case the visitor who contracted disease should have his remedy against the peccant housekeeper. It is imperative that something should be done in this matter; and we venture to think that, to be effectual, equitable compensation to the party who has been exposed to risk through the carelessness of another should form part of the arrangement.

We do not desire to overstate the perils which beset those who go from home to seek health, but it cannot be disguised that the danger indicated is a very considerable one. It is not enough to consult the death-rate of a locality, and to assume the sanitary perfection of a district which does not happen to have had many deaths from zymotic disease. There are many maladies which do not directly kill. It would be interesting, though painfully so, to be able to tabulate the cases of disastrous illness distinctly traceable to the contraction of diseases at health-resorts which, having only an insignificant proportion of deaths from infectious disease recorded against them, contrive to keep up their character. In short, we should deal with disease rather than death, and to do this there must sooner or later be a complete and well-adjusted system for the registration of disease, applicable to all cases and in force throughout the country.

A LONG telegram was despatched to this country on August 6th by the correspondent to *The Times* at Venice as to cholera in North-Eastern Italy which it is by no means easy to understand. As is now well known, cholera, after prevailing for two years in various parts of Italy, reappeared in Southern Italy, where it has been and still is most fatal, and cases were reported about the same time as occurring in the town and province of Venice. Thence there has been a wide diffusion of the disease. To the east the extension is recorded as affecting certain port towns on the Austrian and Hungarian coast and the villages lying near them, but to the west and south it has been on a wide scale, making its way into a number of provinces as far west as Verona and as far south as Bologna and Ravenna. This disease in the north-east of Italy has already caused over 1800 deaths this summer, and in many places, as, for example, in Bologna and Ravenna, the fatality is at the rate of about 50 per cent. of the attacks.

But the correspondent in question, referring to the "commotion in the eastern provinces of Italy," finds as the results of his inquiries "confirmation of the doubts" he has felt, since he first entered the infected district, "whether there is any Asiatic cholera" there. We are at the onset bound to say that we can hardly conceive that any other malady could, under the circumstances afforded by the recent history of Italy, be mistaken for that disease, and this especially in view of the heavy mortality which is occasioned by it. But it is when the correspondent in question comes to explain what the disease may be apart from cholera that our greatest difficulty occurs. Speaking of what he regards as the reprehensible precipitation of the local authorities in regarding all sudden attacks of diarrhœa as cholera, and of the injury done by the consequent isolation practised, he instances what we assume to be a typical case. The case was one which, he alleges, was not Asiatic cholera, but one "rather of typhoid fever," and it is stated that in spite of the protestations of the physician who was called in, the patient was treated for cholera, and he had so far recovered within "two days" as to be released "as the physician predicted." Any more conclusive evidence than that contained in the last few words quoted from the telegram that the disease in question was not typhoid fever, as we understand that term, can hardly be imagined. Typhoid fever certainly is not a disease of which anyone having the most rudimentary knowledge of medicine would predict recovery in two days; but, on the other hand, a number of cases are met with during cholera epidemics as to which careful treatment for that disease does result in comparative recovery within a few days. In Venice, we admit the fatality is not now so great as it is in some other of the towns in the north-eastern provinces, but the disease, which has caused over 900 deaths in the province of Venice, must be regarded as a whole; and looking at it from that point of view, we fail to see that it is an "endemic rather than an epidemic," unless, indeed, the third year's course of cholera in the same country can be held to justify its being regarded as having become endemic. One explanation as to the readiness with which the disease is called cholera by the local medical men is stated to be that the Italian authorities allow a fee of 25 francs for a case of cholera, this sum being greatly in excess of the usual fee for ordinary medical attendance. But this explanation is obviously insufficient in the face of the fact that the disease which prevails at Trieste and Fiume and in the neighbouring villages is styled by the same name; neither does it account for the statement which is afforded by another correspondent of the same paper, to the effect that "cholera" is on the increase on the Dalmatian border and in Croatia. There have, however, been several suggestions that many of the symptoms usually associated with cholera have not been apparent in some of the towns affected, and it has elsewhere been remarked that the disease which exists has in many places been less fatal, and that it has been much more limited in its severity than epidemic cholera usually is; but, on the other hand, it is well known that cholera is a

disease which is more or less marked in its symptoms according to the circumstances in which it occurs, and according to the stage of the epidemic of which it forms a part; and although the disease, as it is prevailing in some of the towns in Italy, tends in some respects to resemble outbreaks of epidemic diarrhœa amongst adults, such as we have had recent knowledge of in this country, yet with the information as yet before us, we are unable to distinguish between the fatal disease which has prevailed in the south at Bari, Latiano, Francavilla, and now at Barletta, and that which is equally fatal in such towns as Bologna and Ravenna in the north-east. On the other hand, diarrhœal epidemics are not nearly so fatal as the least fatal of the outbreaks in the several towns of Italy, and where the signs of cholera are ill-marked it is far more likely that we may be witnessing a last stage of the epidemic of 1884–86 than that the epidemic is due to some other disease than cholera.

Annotations.

"Ne quid nimis."

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

IT is pointed out in the Registrar-General's Quarterly Return just issued, that the English death-rate during the three months ending June last was the lowest recorded in the second quarter of any year since the commencement of civil registration in 1837. The period prior to 1837 may, as regards trustworthy mortality statistics, be correctly described as prehistoric. The death-rate in England and Wales in the second quarter of the year fell below 20 per 1000 for the first time in 1880, and it is noteworthy that since that date the rate has only once (in 1883) reached that figure, while it has three times been below 19, the lowest rate being 18·0 in the quarter now under notice. The mortality last quarter in the chief town population, estimated at nearly 17,000,000, did not exceed 18·3, while in the remaining, and mainly rural, population of nearly 11,000,000 the rate was 17·5. Urban mortality was therefore as 104·6 to 100 taken to represent the rural mortality. The mean proportion of urban to rural mortality in the second quarters of the ten years 1876-85 was 113 to 100. This decline in the excess of urban mortality, especially in the largest towns, is one of the most marked, and at the same time one of the most satisfactory, features of the recent decline in the English death-rate. In the twenty-eight largest English towns, including London, with an estimated population of rather more than 9,000,000, the death-rate last quarter averaged 18·6, and was nearly 14 per cent. below the mean rate in those large towns in the ten preceding corresponding quarters; the decline in the general English death-rate did not exceed 10 per cent. The death-rates last quarter in these large towns ranged from 15·3 in Brighton, 16·6 in Birkenhead, 16·7 in Hull, and 16·8 in Bristol, to 23·9 in Portsmouth, 25·1 in Blackburn, 25·2 in Manchester, and 30·3 in Preston. Thus the Lancashire towns maintain their unenviable notoriety of excessive mortality, even in the present day of generally declining death-rates. Among the most noteworthy features of the Registrar-General's most recent mortality statistics is the remarkable decrease of zymotic mortality and the steady decline of infant mortality. As regards the former of these features, it should be specially noticed that those diseases no longer show the marked excess of mortality in the largest towns compared with that recorded in the remaining and mostly rural parts of England and Wales. The death-rate from the principal zymotic diseases last quarter was 1·55 in the whole of England and Wales; it was 1·81 in the seventy-eight largest towns, and 1·36 in the rest of England and Wales. This excess in the largest towns was almost solely confined to measles and whooping-cough, which diseases urban sanitation has not yet attempted to deal with by isolation. Small-pox was more fatal in rural districts and small towns, and the death-rates from diphtheria and "fever" were fully as high in the mainly rural districts as in the largest towns. This seems to point to the fact that sanitation is not yet in the rural districts and small towns what it has now become in most of the largest towns.

MEDICAL STUDENT LIFE IN LONDON.

THE ever-recurring question of supervision of the medical student in his work and at his play has again been revived by a letter from Dr. Evatt in *The Times*, who makes it an opportunity for unduly praising the care taken at the medical school at Cambridge as compared with the London schools. Dr. Evatt quite ignores the differences in the previous education and training of the average London student and the Cambridge undergraduate, and, forgetting the man, attributes all good or evil to the system. The tone running through Dr. Evatt's letter shows that he is not familiar with the vast changes in supervision and discipline in the London schools during the past twenty or thirty years, and he is apparently under the belief that idleness and riot are still allowed to go unchecked as in the days of his own pupilage. Bob Sawyers and Benjamin Allens are really nearly as extinct as the dodo, and medical students, socially and professionally, at work and at play, do not differ very much from other species of the genus student. By some authorities, not unconversant with their manners and customs, they are considered to be as gentlemanly in their behaviour and as earnest in their studies as even the theological, legal, or military student. A lad passing straight to a medical school from his ordinary school life merely passes from one stage of discipline to another. "Walking the hospital" is anything but standing at the front door in idleness, and for the first two years really means incessant work from nine till four or five in the dissecting-room, laboratory, or class-room, and Dr. Evatt is evidently quite mistaken as to the amount of discipline exercised therein. Attendance at some set lectures may be a little lax, but this is only because the student's work has become more and more practical every year, and because the increasing tendency is to lessen their number instead of insisting on a perfunctory attendance as in days gone by. Formal reports may not be sent home periodically by more schools than two, but school committees exist, we believe, in every London school, and they are not slow to enforce discipline or to warn the idler that he must work or else his parents will be asked to remove him from the school. Dr. Evatt seems really to believe that perpetual pupilship is a fact, and not a mere verbal phrase, but we should have thought that everyone who had given the subject some *study* was aware that this was always, as Mr. Bruce Clarke puts it, conditional on "the student's work and conduct being satisfactory to the hospital authorities and to the medical officers." There may be many reasons why the fees of the student should be paid for each class separately when he attends it, instead of in a lump sum, as is the present custom in London, but any supposed impossibility of getting rid of an idle student has never struck us as being concerned in the question. The difficulty of finding residences for medical students is sufficiently well known, and the eager desire of everyone connected with medical education to foster residential halls is shown practically by those who have built such rooms, and by other authorities who are trying to build them; but Dr. Evatt must surely be aware

that on such points as these London can hardly be fairly compared with Oxford and Cambridge. Does he know anything of student life elsewhere—say in Edinburgh, Glasgow, Aberdeen, or Dublin, or even in Germany? Do not the authorities of the London schools exercise as much social supervision over students as is done at other great centres of medical education?

THE CHOLERA EPIDEMIC IN SOUTHERN EUROPE.

THERE has been a severe recrudescence of cholera in Southern Italy during the week ending August 10th. Almost all news had ceased from the south, when on the 7th of the month information came to the effect that at Barletta, a port town to the north of Bari, there had been 132 attacks and 45 deaths during the previous twenty-four hours. At Barletta the disease has since that date been maintained with great severity, and in the four days ending the 10th, the total number of attacks and deaths there have been 536 and 217 respectively. At the same time, news has been received of an outbreak at Palo, and the bulletins as to cholera in Brindisi have been resumed. In the north-east of Italy there has been no extension of the disease further westward, but nearly all the towns and villages hitherto affected continue to record fresh attacks and deaths either daily or at intervals of a few days only, and in some towns the mortality is at a rate which is rarely exceeded during the worst periods of epidemic cholera in Europe. Thus, during the week we are dealing with, there have been 84 fresh attacks and 52 deaths in Bologna, 138 attacks and 62 deaths at Ravenna, 53 attacks and 22 deaths at Verona. The disease has also been steadily maintained at Chioggia, Castelfranco, Verona, Padua, and other places. In Venice the mortality is comparatively small. The daily record of attacks in that city have varied from 4 to 11, and the deaths have only exceeded 1 on the 7th, when 5 fatal attacks occurred, the total weekly record being 46 attacks and 10 deaths. In all, there have been recorded from Italy during the week ending Aug. 10th 1320 attacks and 484 deaths. In Austria the definite news as to cases of cholera is still limited to Trieste and Fiume. At Trieste there have been 26 cases and 16 deaths, and at Fiume 4 cases and 2 deaths. This, however, takes no cognisance of the surrounding villages which have previously been announced to be infected. This local prevalence of cholera has led to the departure from Trieste of no less than 15,000 persons. Four casee are also reported at Naples, the persons attacked having come from infected districts. The disease, again, is stated to be increasing in the direction of the Dalmatian border and in Croatia.

CACHEXIA STRUMIPRIVA.

THE records of cases in which a condition resembling that of myxœdema has developed after extirpation of the thyroid gland are increasing. The latest is an account furnished by Dr. Hans Schmidt of the Augusta Hospital, Berlin (*Berl. Klin. Wochensch.*, 1886, No. 31). It appears that during the five years 1880-86, twenty-five cases of thyroidectomy have occurred at this hospital, mostly under Professor Küster's care. Of these, six were cases of total extirpation, seventeen of unilateral, and two of malignant growths. All the unilateral cases survive, and not one of them has developed any ulterior symptoms, the interval since operation varying from six months to four years. Of the cases of total extirpation, two died of hæmorrhage following operation, another died about a year later from phthisis, another patient, a young girl, was perfectly healthy several years afterwards, and a fifth required tracheotomy six months after the thyroidectomy on account of paralysis of the abductors. In only one case had the manifestations of cachexia strumipriva arisen. This was a lad who, at the age of fourteen years, was admitted in July, 1883, suffering from an enormous goitre, which caused considerable dyspnœa. The operation had to be done in two sittings, and on each occasion tracheotomy was necessary, the cannula being removed the day after. After the lapse of two years and three-quarters he was brought to the hospital by his father, with the statement that ever since the operation he had gradually deteriorated both mentally and physically, leading a listless, indolent life, taking no interest in anything. The change in the lad's physique was most striking, and thoroughly accorded with Kocher's description. The body was undeveloped, the muscles were lax, the skin flabby and of a yellowish colour; there was slight œdema of the cheeks and back of the hand; the mucous membranes were pale the testes very small; no splenic enlargement existed. The trachea appeared to be very thin, and there was no trace of a thyroid gland. The head was relatively large, and hair scanty; speech slow and drawling; aspect stupid and dull. He walked slowly, and was easily tired. The larynx and urine were normal. His memory had become defective.

SCHOOL BOARD CONUNDRUMS.

SURELY Mr. Endean could not have been serious when, at the last weekly meeting of the School Board for London, he cited as questions put to pupils in Board schools the following conundrums:—"1. What would be now thought of crusades, trial by ordeal, and Smithfield fires? 2. How may a current of electricity be produced, and what magnetic, chemical, and mechanical effects may be brought about by means of such a current? 3. A sphere weighing 10 lb., and having a radius of 7 in., hangs by a cord from a point in the wall, and leans against the wall. The point of contact of the sphere and wall is 2 ft. below the point of suspension. Find the length and the tension of the cord. 4. State all the conditions you know of which affect the climate of any place. 5. Why are the following pairs of words called 'doublets': example and sample, faction and fashion, diamond and adamant? 6. State precisely how you would proceed if you were required to prepare a sample of pure hydrogen. 7. Write out examples of a definition, an axiom, a problem, and a theorem. 8. Describe the grievances which led to the Americans asserting their independence. 9. It is said that 'the sun never sets on the Queen's dominion.' Taking a line from London eastwards, denote the points which would make this statement fairly correct. 10. Explain the terms—motion, velocity, acceleration, momentum, and energy." If such questions were really put, we venture to think the lowest abyss of dementia must have been reached by those who preside over the vagaries of our educators. No wonder Sir James Crichton Browne found the children had headaches.

EASILY SATISFIED.

ON the 4th inst. an inquest was held by Mr. William Carter on the body of a girl, a shirt-maker, aged sixteen years, who up to the time of her death had resided with her parents. The deceased had enjoyed good health till the 29th ult., when she was attacked with sickness and pains in the abdomen, and had to return home from her place of employment. On the following day she kept her bed and the sickness continued, and at midnight the pains increased to such an extent that it was thought prudent to send for medical assistance. No doctor, however, could be obtained until six o'clock on the 31st ult., when Dr. Farr, through the agency of the police, attended and pronounced life extinct. At the inquest Dr. Farr deposed that the cause of death was very obscure, and he could not express any opinion without a post-mortem examination. The deceased was a fine and fully-developed young woman, who had enjoyed good

health, and the body was well nourished. There was nothing to indicate disease of the heart, brain, or any other organ, and he was of opinion that death was due to some irritant in the stomach. A sister of the deceased was recalled, and stated that the unfortunate girl had always suffered from constipation. In spite of the mystery attaching to the death, and the opinion of Dr. Farr as to the presence of an irritant, the jury after a short deliberation returned a verdict of "Death from natural causes, arising on inflammation of the bowels." We have no hesitation in expressing the opinion that the verdict was unsupported by medical evidence, and that in the interests of the public Mr. Carter should have ordered a post-mortem examination to be made.

THE INFLUENCE OF SANITARY WORKS AT MERTHYR-TYDFIL.

MR. DYKE, the well-known health officer to the town of Merthyr-Tydfil, has now completed a series of twenty annual reports; and in so doing he makes a summary showing the proportion of deaths per 10,000 persons living during a series of groups of years. The first period is that from 1845 to 1855, before any sanitary works were commenced; the second includes the six years 1856-61, during which paving works and removal of nuisances were attended to; the third relates to the four years 1862-65, whilst the works specified were still being carried out, and whilst water was also being laid on to the houses; the fourth includes the ten years 1866-75, when the water-supply was perfected, whilst the sewers and drains were being laid and whilst the sewage disposal was being completed; and a fifth deals with the ten years 1876-85, when the whole of these completed works were in operation. The table shows a gradual and continuous reduction of the death-rate from all causes from an average of 332 per 10,000 in 1845-55 to one of 231 in 1876-85, the proportionate mortality of infants under one year of age being reduced from 80 to 45 per 10,000. The rates from the contagious fevers—measles, scarlet fever, and whooping-cough—do not seem to have been in any way affected by sanitary improvement. This we were prepared for; but it is curious that the same applies to diphtheria. Probably this is due, not so much to the fact that this latter disease is independent of sanitary conditions, as to the circumstance that diphtheria has of recent years been much more widely diffused in this country than it was during the earlier periods referred to in the table. On the other hand, there has been a marked diminution in the other forms of "fever." "Continued fever" has practically ceased to exist as a separate disease—a circumstance doubtless due to improved nomenclature; and the mortality from typhoid or enteric fever has fallen from 21 to 3 per 10,000. The death-rate from infantile diarrhœa has also fallen from 11¼ to 4 per 10,000; and the average age at death has increased from seventeen years and a half to twenty-seven years and a half, a clear gain of ten years of life. It will be observed that in making these comparisons Mr. Dyke is following out the plan adopted by Dr. Buchanan in 1866, when he reported on the results of the adoption of sanitary works in many of our large towns, including Merthyr-Tydfil, and hence it is appropriate that the information as to the results of the drying of the subsoil by the construction of sewers should be specially dealt with and brought up to current date. The influence of such drying has brought about a reduction in the phthisis death-rate from 38 to 22 per 10,000; but acute and chronic bronchitis and pneumonia have during the same period become more fatal, the corresponding rate for this group of affections having risen from 33 to 45—a result due, in the opinion of Mr. Dyke, to the continued occupancy of damp and unventilated dwellings. On the whole, this summary affords the most convincing proof that properly planned and well executed sanitary works result in a vast decrease in sickness and death, and by producing healthiness and increased duration of life they become a source of profitable income to the communities affected by them.

CRUSHING THE GRANULATIONS IN TRACHOMA.

DR. KRAMSZTYK, writing in the *Gazeta Lekarski*, advises a method of treating granular lids or trachoma which was proposed by Dr. Wicherkiewicz, and which consists of a forcible crushing of the granulations. The eyelid is everted and held by an assistant, and is then subjected to pressure between the two thumb-nails, the operator moving his thumbs to and fro so as to act on as much of the eyelid as possible. Where the granulations cannot be reached in this way, such as those situated at the canthi and on the plica semilunaris, they are pricked with a needle, and then crushed by means of a pair of forceps or some other suitable instrument. The operation is very painful, and cocaine seems to be of little use. Under chloroform, the whole of the granulations can be crushed at a single sitting. Otherwise the length of time and the number of sittings required to effect a cure depend on the abundance of the granulations and the patient's power of endurance. Where other disease of the conjunctiva exists, it must of course be attended to, and different measures adopted. The after-treatment consists in the prolonged application of cold water dressings to the eye.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE annual general meeting of this Association was held in the rooms of the Medical Society, 11, Chandos-street, on August 9th, under the presidency of Dr. G. H. Savage. At the opening of the proceedings there were many expressions of deep regret at the recent and somewhat sudden death of Dr. Eames, the president for the past year, under whose auspices the previous annual meeting had taken place at Cork, and a resolution of sympathy with his family was unanimously adopted. Dr. F. Needham was elected to be president for the year 1886-87. Some discussion arose in reference to the examinations for the certificate now granted by the Association of competency in psychological medicine. Among other modifications, the fee was lowered to three guineas, and it was decided that the examination should be open to anyone who was a student in medicine and of age; that there should be no restriction as to his being qualified before applying for the certificate, but that, if successful, he should not receive it until he was registered. It was decided that the next annual meeting should be held in London. At the afternoon meeting the President read an address on the subject of the pathology of insanity, which was followed by a discussion in which Drs. Clouston, Conolly, Norman, Hack Tuke, and Rayner took part. The members afterwards dined together at the "Ship" at Greenwich.

HOUSE-BOATS AND THE THAMES CONSERVANCY.

OUR report on the pollution of the Thames at the Henley Regatta has been greeted with marks of approval from all quarters. We have received innumerable letters confirming all the evils our Commissioner denounced, and, finally, we are pleased to note that the Thames conservators are seeking to deal with the question. Their efforts, unfortunately, do not as yet promise a very brilliant result. We are told that in regard to house-boats and launches the conservators appear to rely on the requirements of registration to prevent the pollution of the river. Certainly, as the *Law Journal* points out, the conservators could not be compelled to register a boat which obviously, from its construction,

broke the sanitary law established by statute for the Thames. For our part, we fear that it will complicate the issue if the vexed question of numbering and registering boats be mixed up with the imperative necessity of enforcing the sanitary law. If a pickpocket plied his industry on board a house-boat, or if a quarrel led to a case of homicide, the police would not wait till the boat was numbered and marked, according to some new regulations, before proceeding against the culprit. Then why should the inhabitant of London wait till house-boats have "painted upon each bow, and upon each quarter, either the register number or the name" of the boat before the water he is compelled to drink is protected from a frequent and dangerous contamination? Further, supposing that in the course of time the registering is effective in abolishing the closets on board these boats, this will not prevent the throwing overboard of all manner of refuse and, perhaps, of soil. Where a great number of floating dwellings collect together, as in the event of a regatta, a scavenger-boat still remains a necessity. When, on the contrary, the house-boats are scattered in all directions, then watch should be kept and prosecutions instituted against those who are detected and can be proved to have contaminated the river. The law in such cases inflicts very severe penalties. There is not so much need of new regulations as of an organised service for carrying out the existing law.

NEW MEDICAL GRADUATES FROM HEIDELBERG.

SOME of our correspondents are being alarmed at the prospect of an immigration of foreign graduates under the new Medical Act. It will be interesting to see the answer that will be given by the Council to the application of Sir Henry Roscoe, of Manchester, and Professor William Thomson, of Glasgow, when they apply to have the degree of Doctor of Medicine, which they have just received at Heidelberg, registered. It does not do to be too critical about honours distributed on such a rare occasion as the 500th anniversary of a university, and it is perhaps as easy to acquiesce in Sir Henry Roscoe and Professor Thomson receiving medical degrees as in the Grand Duke receiving the degree of Doctor of Theology. These somewhat fantastic actions notwithstanding, the jubilee seems to have been a great event, upon which Germany generally, and Heidelberg especially, may be heartily congratulated.

PRESERVATION OF FRESH FISH.

OF late years we have been accustomed to associate economy in the preservation of food with colonial or transatlantic enterprise. It is therefore the more encouraging to learn that Europe is equal to inventive progress in the same direction, and of this we have apparently a genuine proof in the method of preserving fresh fish introduced by Mr. August R. Roosen of Hamburg. By his process, which is a simple one, the fish when caught are enclosed in steel barrels each capable of accommodating 300 lb. weight, immersed in a 3 per cent. antiseptic solution of boracic acid, tartaric acid, and salt in water, which is forced in by means of a hydraulic hand-pump, while air is simultaneously expelled. An air-tight lid closes the cask, and the bung-hole is a valve to which the pump is attached when in action, and which at a certain stage is closed by internal pressure. It is also satisfactory to find that a year's experience has proved its practical efficiency, at all events in the hands of the introducers. Meat is stated to have been preserved by the same process. On board of the larger fishing craft the plan appears likely to answer well. One or two points in connexion with its working will require careful regulation. With regard to the water to which the antiseptics are added, if this is to consist of sea-water as might naturally be expected, it will still be necessary for coast fishers to be careful as to its purity from river or port refuse. It will also be necessary to guard against the overcrowding of fish. If this should happen, even powerful antiseptics will be of little avail, since perfect exclusion of air is hardly possible. We hope that future use will justify the promise of this novel and ingenious experiment.

PLUGGING THE TRACHEA IN LESIONS OF THE PNEUMOGASTRIC.

IN an article in the *Nordiskt Medicinskt Archiv*, Dr. Jens Schou of Copenhagen discusses at some length the treatment of traumatic lesions of the pneumogastric nerve by means of permanently plugging or tamponing the trachea. Dr. Schou gives a succinct description of the doctrine propounded by Traube, that the pulmonary affection caused by section of the pneumogastric nerve is a pneumonia by aspiration—a theory which has lately been supported by other observers, more especially Gärtner. It appears that with animals the unilateral section of the pneumogastric or of the recurrent nerve is generally harmless; but in the human subject it causes pneumonia by aspiration. The reason seems to be that in animals the sections are effected without complications, whilst in men they are as a rule the result of some serious operation capable alone of causing a state of collapse from which pneumonia by aspiration might result. Here, one of the vocal cords is paralysed, which serves to increase the effect of the lesion. The treatment indicated is, then, permanent tamponing of the trachea till the end of collapse, by which time the healthy cord will be accustomed to replace the diseased one. Below's method—namely, tamponing above the cannula—is recommended, an india-rubber ball above. Dr. Schou, however, prefers to introduce a tampon of some antiseptic material such as iodoform gauze. A tampon of this kind is easily applied by means of a cannula open above. If it be necessary to cut the pneumogastric or recurrent nerve, tracheotomy and tamponing should be immediately resorted to, in order to prevent the development of pneumonia by aspiration. Should some time have elapsed before pneumonia by aspiration fully developed has been discovered, it is still necessary as quickly as possible to do the tamponing in hopes of arresting the progress, for in these cases the nerve may be paralysed for some time.

OPIUM POISONING.

AN inquest was held a few days ago on the body of a woman, the wife of a labourer, who committed suicide by taking an overdose of laudanum. The husband stated that about six weeks ago she nearly died from taking the same medicine. On the day of her death, quite early in the morning, he was awakened by his wife, who told him she had swallowed "some more of that stuff again." She was removed to the infirmary, where a few hours later she died. The coroner strongly condemned the system by which laudanum and other deadly poisons could be obtained without question, and the jury after some deliberation returned a verdict that the deceased committed suicide whilst in an unsound state of mind. It was mentioned in the course of the inquiry that the deceased had taken one ounce of laudanum. With regard to this, it is well known many people have recovered after taking very much larger doses of laudanum. We would also point out, in the absence of the old-fashioned stomach-pump, a piece of common indiarubber gas-tubing, fitted with a glass funnel by which it could be filled with water, would suffice not only to empty the stomach of its contents, but to wash it out thoroughly. The use of apomorphine as an emetic is now generally recognised, and it is to be regretted that in this case it was not resorted to for the evacuation of the poison. Coffee in the form of an

enema, with hypodermic injections of atropine repeated from time to time, are the true physiological antidotes; whilst the cold douche, and electricity or massage to the extremities, would act as valuable accessories.

OFFICIAL CHOLERA MEMORANDUM.

IN view of the recent serious extension of cholera in Italy and the appearance of the disease in certain Austrian ports of the Adriatic, the Local Government Board have drawn the attention of sanitary authorities in this country to the memorandum which was issued in July, 1885, on Precautions against the Infection of Cholera, by Dr. Buchanan, their medical officer, and they again urge upon authorities the importance of continuing, without intermission, to take all measures within their power for maintaining their districts in a state of security against the infection of that disease. The memorandum in question, after explaining the circumstances under which cholera habitually spreads in this country, draws especial attention to the need for maintaining all water-supplies free from the risk of pollution, for securing the systematic and frequent removal of all filth and refuse from the vicinity of dwellings, and for maintaining a state of cleanliness everywhere and under all circumstances; and, lastly, it draws attention to the importance of remembering that any pains taken and costs incurred for the purposes referred to cannot, in any event, be regarded as wasted. Indeed, the sanitary improvements which would justify a sense of security against any apprehended importation of cholera would, to their extent, give amply remunerative results in the prevention of those other diseases. This is eminently true, and some of the most permanent works which have conduced to the saving of human life in this country have resulted from efforts to cope with anticipated advents of cholera.

DEATH OF DR. ROBERT FOWLER.

WE regret to have to announce that Dr. Robert Fowler, of Bishopsgate-street Without, and Old Burlington-street, died at Hampstead on the 7th inst. from pyæmia at the age of fifty-eight. He was M.D., and M.R.C.P. Edin., M.R.C.S., Associate of King's College, London. He was one of the Examiners to the Society of Apothecaries, late Manager to the Metropolitan Asylums Board, late President, Librarian, and Orator to the Hunterian Society, and author of a "Medical Vocabulary." He exposed the celebrated case of the Welsh Fasting Girl, on which he published a book, entitled "Observations on Death from Starvation." Dr. Fowler was a frequent contributor to the medical journals, and was much esteemed by wide circle of professional friends, as well as by a large *clientèle*.

MATRON v. MEDICAL STAFF.

SINCE alluding in a recent issue to the unfortunate state of affairs at the Blackburn and East Lancashire Infirmary, which has led to the resignation of the entire medical staff, we have learnt further particulars, which only serve to confirm our view of the arbitrary interference of the majority of the Board of Management with a question which belongs solely to the medical authorities. For some time past the medical staff have felt the need of having a second qualified resident at the infirmary, but the board have hitherto declined to entertain the proposal on the score of expense. The creation of a vacancy in the office of dispenser led the staff to suggest the appointment of a junior house-surgeon and dispenser; but since the use of the former title would involve a change of bye-laws, it was recommended that the dispenser should be medically qualified. In desiring to have a second qualified resident the staff acted, it seems to us, with regard to the comfort and welfare of the patients and the proper working of such an institution. They, and they only, could possibly be judges of what was needed in this direction; but a majority of the board (twelve to ten) rejected the proposal, one argument which appeared to have most weight being that the matron had objected to such an appointment, and had threatened to resign if it was made. We are seriously assured that the fear of losing the services of the matron was the principal reason assigned by the majority. If that be so, we can only express surprise at the manner in which a recommendation of the medical staff has been set aside, and trust that the Board of Management will take speedy steps to reverse a decision which is calculated to be disastrous to the welfare of the institution.

SPURIOUS CHARGES AGAINST MEDICAL MEN.

MR. JUSTICE FIELD has done loyal service to the cause of justice, and incidentally he has done good service to the medical profession, by sentencing a man who, to extort money, threatened a medical man with a ruinous charge. It is intolerable that a class of the Queen's subjects who live by their honour in an especial sense, and to whom any imputation on their morality is an irreparable injury, should be exposed to charges and threats of charges which are incited by dishonest greed or malice. Women and men are unscrupulous in what they say or do against medical practitioners, and the more kindly and generously they are treated the greater is the peril from their black ingratitude. The medical practitioner threatened in this case acted with courage and sagacity. He placed the matter at once in the hands of the police. It would be well if every medical man resolved to pursue the same wise course. The moment a charge is made, however vague it may be, let criminal proceedings be instituted. It is useless bringing actions at law. Treat the offence as a crime.

LIGATURE OF THE SUBCLAVIAN ARTERY.

AT the third meeting of the Italian Surgical Society Dr. Lampiasi reported two cases in which he had successfully tied the subclavian artery, after failure of ligature of the axillary under the clavicle. In the discussion which followed a case was referred to in which, two years ago, Dr. Piccinini, at the Ospedale della Consolazione in Rome, tied the subclavian just outside the scaleni for wound in the highest part of the axillary artery. The result was most satisfactory. (*Gazzetta degli Ospitali*, August 4th.)

TOWN REFUSE.

MR. JOHN BRAYE, a member of the Kensington Vestry, has moved for a select committee to report on the practicability of taking road-sweepings and dustbin refuse thirty miles into the country and giving it to the farmers free of cost; and he has requested, through the public press, information from farmers, surveyors, and others. Mr. Braye is evidently a gentleman who is not disposed to trust to contractors for the performance of the important duty of scavenging, and we shall await with interest the publication of the report of his committee, for the reason that the disposal and utilisation of refuse are evidently not to be allowed to depend upon questions of profit. If Kensington, like some other parishes, possessed a water-way, the cost of removal would not be so great as where dependence must be placed upon roads alone. Farmers will gladly utilise road sweepings at certain periods of the year, but for the rest it is necessary to find some place of deposit; and with regard to this, it is essential that it shall be far removed from all dwelling-houses. The subject could be dealt with much

more economically by an authority acting for the whole metropolis; and it is possible that this conclusion may be the outcome of the report of the Kensington Vestry.

MEDICAL REGISTRATION.

ONE good, if incidental, effect of the new Medical Act may be anticipated. As medical men, under it, are to have the power of voting for a representative in the Council, they may be expected to be more anxious about their own registration, and more careful in forwarding to the Registrar any change of their address. It is important, before the time of the election in November, that all errors of the Register be corrected and all registrations be complete. The Registrars of the several Branch Councils are doing their part in this matter. They are sending to each registered practitioner, by post, a printed statement on the importance of registration, with a copy of his own particular registration, for any correction which may be needed. Every practitioner should give this matter his immediate attention, and return the slip, with his affirmation of its correctness, as required by the form. Those who have been erased from the Register under Section 14—generally persons who have changed their address without informing the Registrar—should immediately send the necessary information, with a request to be restored to the Register.

REVOLVER BULLET LODGED IN THE BRAIN; RECOVERY.

AT the Society of Surgery of Paris, on May 26th, M. Prengrueber presented a man who had fired a revolver at the middle of his temporal fossa. The ball, seven millimetres in diameter, lodged in the brain. The three days following the accident the surgeon abstained from interference, as the only symptoms were general prostration, with lowering of the temperature. Epileptiform attacks having occurred on the fourth and fifth day, M. Prengrueber exposed the cranial wound and removed several bony spicules, which had penetrated the brain. A stilet having failed to detect the bullet, though passed along its course to a depth of five centimetres, nothing else was done. The epileptiform seizures did not recur, and the patient left the hospital at the expiration of a month without any cerebral complication.

THE EPIDEMIC OF ENTERIC FEVER AT SHOREHAM.

THE epidemic which was announced at Shoreham and at Lancing College is now stated to have been due to the consumption of milk from a dairy in Shoreham, where a well liable to pollution was allowed to be used as the water-supply. Shoreham has before this been liable to the same disease. The extension to Lancing College was due to the occasional use, during some cricket matches, of cream which was brought from the Shoreham dairy to Lancing to be served up with strawberries. At Lancing College the outbreak is over.

THE HOURS OF TRAMWAY MEN.

THE directors of the North Metropolitan Tramways Company have little or no sympathy with the talk about "slavery" and overwork among their *employés* to which many of the London public are addicted. Thirteen and a half hours per day of continuous work, during a week of ten days, with meals taken on the car, they seem to regard as matters of no great moment. We do not agree with them. Statistics may not perhaps be sufficiently exact to show how much health per annum is lost under these arrangements. That the loss is considerable we do not doubt. The system is one of unthinking and unwholesome hurry, and cannot fail to balance its money profit by a culpable and extravagant waste of human working power. Snatched meals are condemned by an all but universal trade custom, while the ten-day labour period has been tried before and has failed, even under the daily working conditions of the last century, which were probably far easier than our own.

THE ODESSA MEDICAL SCHOOL.

DIFFICULTIES of a pecuniary kind are at the very outset interfering with the commencement of the proposed medical school in Odessa. The rector of the university having applied to the Finance Ministry for £1000 for the purpose of enabling the architect to visit various foreign universities, and so to perfect his designs for the clinic and the scientific institutes, laboratories, &c., has been met with a *non possumus*. The municipal authorities, too, do not seem to be as complacent as was expected regarding the site, for they have refused the piece of ground upon which the university professors had set their hearts for the Anatomical Institute. It is to be hoped, however, that in course of time all these difficulties will have been arranged, and that Odessa will have the complete medical school which is so much required in South Russia, and for which so large a city is eminently adapted.

DIRECT REPRESENTATIVES.

DR. B. W. RICHARDSON has issued an address, presenting himself as a candidate for the office of direct representative of the registered practitioners of England and Wales. We understand that he has come forward on the invitation of a large general committee. Dr. Dolan, of Horton House, Halifax, has also issued an address. Dr. Dolan bases his claims on the facts that for seventeen years he has been a Poor-law medical officer, and for twenty-one years a general practitioner. It will be seen that the British Medical Association decline to act as a body in the way of nomination. We think this both wise and in good taste on the part of the Association. We are informed that, in addition to the list published last week, numbers of representative men in every district have signified their intention to support Dr. Glover's candidature.

THE SANITARY CONGRESS AT YORK.

IN connexion with the meeting of the Sanitary Institute in York next month (from the 21st to the 25th), under the presidency of Sir Spencer Wells, it is proposed to hold a conference of medical officers of health on the 22nd, in which, among others, members of the Yorkshire Association of Health Officers will take part. The subjects already decided upon are: the Appointment and Tenure of Office of Medical Officers of Health; Free Hospitals for the Treatment of Infectious Cases; and Local Government for Counties in relation to Sanitary Questions. It is anticipated that the conference will be well attended. The Health Exhibition, including sanitary apparatus and appliances in connexion with the Congress, will be held in the Yorkshire Fine Art and Industrial Institution Buildings, St. Leonard's-place, from Sept. 21st to Oct. 16th.

THE VOLTA PRIZE.

Le Progrès Médical (Aug. 7th) reports that the French Minister of Education has just fixed the date of competition for the Volta Prize. It is of the value of £2000, and was instituted by a decree dated June 11th, 1882, in favour of the author of a discovery which shall render electricity economically useful in one of the following applications:—As a source of heat, of light, of chemical action, of mechani-

cal power, as a means of transmission of despatches, or in the treatment of disease. The competition will remain open to June 30th, 1887, and the prize will be awarded the following December. Scientists of all nations may compete. A commission, nominated by the Minister of Education, will be charged with the examination of the discovery specified by each competitor, with a view to determine if it fulfil the required conditions.

FOREIGN UNIVERSITY INTELLIGENCE.

THE following vacancies in Spanish university professorships are officially announced:—Santiago: the chair of surgical anatomy, operations and bandaging. Seville: Cadiz Faculty of Medicine, the chairs of medical pathology and therapeutics. Saragossa: the chair of anatomy. The salary attached to each of the above chairs is about £140 annually.

There are three candidates for the vacant surgical professorships in Graz—viz., Professor von Winiwarter of Liège, Professor Wölfler of Vienna, and Professor Nicoladoni of Innsbruck. In Munich Dr. Posselt has been nominated Extraordinary Professor of Dermatology, and Dr. Bezoldt Extraordinary Professor of Otology.

The long-expected opening of the Siberian University at Omsk will have to be still further delayed owing to the impossibility of obtaining professors in the legal and medical faculties.

THE INTERNATIONAL MEDICAL CONGRESS.

WE were in error in stating that Sir James Paget is likely to attend the International Medical Congress. We may, however, still hope that one who would be so much missed will find his way to Washington.

ON the 10th inst. the death occurred of Mr. George Busk, in the seventy-eighth year of his age, after a lingering illness. The deceased became a member of the Royal College of Surgeons in 1830, and in 1843 was selected to receive the Fellowship of that institution. He was elected a member of the Council in 1863, and in 1871 was chosen president of the College. He was a Fellow, and had twice been vice-president of the Royal Society, and also a Fellow of the Linnæan, Geological, and Zoological Societies. Mr. Busk was a trustee of the Hunterian Museum, a member of the Senate of the University of London, and for some years acted as examiner in comparative anatomy and zoology to that university. At the time of his decease Mr. Busk had just completed an elaborate report on the zoophytes found during the expedition of the *Challenger*.

DR. R. J. MANN, whose death at the age of sixty-five has recently been announced, was well known in scientific circles in London. He was a member of the Council of the Society of Arts, for three years President of the Meteorological Society, and was a member of the Astronomical, Geographical, Photographic and other societies. In early life he held a Government appointment in Natal, where he served as head of the Education Department and medical officer for many years. Dr. Mann was a popular and prolific writer. Many of the recent scientific articles in the *Edinburgh Review* were from his pen, and he was a frequent contributor to several magazines and reviews.

PROFESSOR WEICHSELBAUM has been given space in the Vienna Anatomical Museum for the accommodation of his class in pathological histology.

THE death is announced of Dr. Frank Hamilton, the eminent surgeon of New York.

THE lectures on Darwinism, which Professor Mathias Duval delivered at the Paris School of Anthropology, have just been published by Delahaye and Lecrosnier.

ON Monday next, M. Chevreul, the famous French chemist, will complete his hundredth year, and the Parisians will celebrate the event by a grand fête.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FOURTH ANNUAL MEETING,

HELD AT BRIGHTON, 1886.

ALTHOUGH the weather on the opening day of the meeting—Tuesday, August 10th—was not at first very propitious, the number of members who thus early appeared on the scene augured well for the probable success of the meeting. An unusual number of eminent foreigners were among those early arrivals, including Professor Charcot, of Paris, and Dr. Nathan Davis, the President-elect of the International Medical Congress to be held in Washington in September, 1887. Certainly no pains had been spared by the Municipality and medical profession of Brighton to welcome their visitors. The Royal Pavilion was placed at the disposal of the Association, so that the large general meetings could be held in the dome and the sectional meetings in the various apartments of this curious but interesting building. A museum of pathological specimens, pharmaceutical preparations, surgical and scientific instruments, &c., was opened in the Corn Exchange, which abuts on to the dome; whilst in the Museum of Science and Art adjoining the Pavilion there was a most admirable collection of bacteriological apparatus, cultivations of micro-organisms, microscopical preparations, and photo-micrographs exhibited by Mr. Edgar Crookshank in connexion with the Section of Public Medicine. Few places could be better adapted for such a purpose, whilst the proximity to London has done much to bring many to spend the week on the coast. An admirable guide-book, compiled by Mr. Friend, was presented to every member of the Association.

The Council were entertained by the Mayor at a banquet on Tuesday evening.

The First General Meeting was held on Tuesday afternoon in the Dome. The chair was taken by the retiring President, Dr. W. T. Edwards (Cardiff), who, after a few words expressing his hearty thanks for his election last year, and his hope to continue an active member of Council, said that he had great pleasure in handing his office over to Dr. Withers Moore, who would certainly well discharge its duties.

The PRESIDENT, in taking the chair, offered a hearty welcome to the Association in the name of the municipal authorities and the medical profession of Brighton. He mentioned that there were a very large number of distinguished visitors present, especially from America, including Dr. N. S. Davis, the President of the forthcoming International Medical Congress. He trusted that the meeting would be a pleasant and prosperous one, and he felt sure that socially and scientifically it would take a high rank.

A vote of thanks to the retiring President and a motion that he be elected a Vice-President for life was moved by Dr. Waters, seconded by Dr. Chadwick, and carried by acclamation.

The Report of the Council was then presented by the President of the Council, Sir B. Walter Foster, M.D. It began by alluding to the fact that since the Association last met in Brighton, in 1851, the population of the town had increased from 65,000 to 107,000; whilst the Association, which numbered 1200 members then, has at present nearly 12,000 members, and an invested capital of upwards of £22,000. New branches of the Association are to be formed at Limerick, Bermuda, Ceylon, Calcutta, and at Oxford. The labours of the various committees

were reviewed. The Medical Reform Committee, presided over by Dr. E. Waters for eighteen years, had accomplished its work by the passage of the new Medical Act, and a tribute of praise was accorded to Dr. Waters and to Sir B. W. Foster for the share taken by them in this work, especially in respect to the number of direct representatives allotted to England. The Parliamentary Bills Committee had rendered assistance in amending the Lunacy Acts Amendment Bill, which passed the House of Lords; in considering the health clauses of Local Corporation Bills, with reference to compulsory registration of infectious diseases, and in other subjects. The Scientific Grants Committee had not exceeded the grant of £300; but regret was expressed that no satisfactory report had been received from the recipient of a special grant of £100 for research upon methods of conferring immunity in septic diseases. The Scientific Scholarships, held for three years by Mr. Watson Cheyne and Dr. Augustus Waller, would expire in October. Elaborate reports had been received from Mr. Cheyne upon the Relation of Micro-organisms to Disease, and from Dr. Waller upon the Fatigue and Recovery of Muscle and Nerve. The Collective Investigation Committee apply for a renewal of the annual grant of £600; and the Council being aware that many members of the Association feel disappointed with the inadequate results of this movement, have appointed a subcommittee to inquire into it from a financial point of view. The Middleman prize for the best essay on Discoveries in Ophthalmic Science and the Stewart prize for the best work on Contagious Diseases would again be awarded. The question of more commodious premises had been considered by a Committee of Council, but no definite result yet arrived at. A series of rules and regulations regarding the appointment of committees had been adopted by the Council, and were embodied in the report, which concluded with an enumeration of some of the losses sustained by death during the past year.

Sir B. W. FOSTER, in moving the adoption of the report, briefly commented upon the paragraphs of the report. As regards direct representation, he said that this was due to the untiring assiduity of Dr. Waters. The whole status of the profession would depend on those who might be elected. With respect to improved premises for the Association, he contended that it would be unwise to spend all the capital of the Association in securing them; for, as a representative body of the profession, they might some day require funds if they were engaged in contending with great corporations. The future of the medical profession depended on the way in which they developed their resources.

Dr. CARTER (Liverpool) seconded the motion. He referred to Medical Reform and the great assistance given by Sir B. W. Foster in Parliament in securing three representatives for England. He pointed out that the British Medical Association, having been mainly instrumental in securing this favour of Direct Representation, should take steps through its Medical Reform Committee to select three gentlemen who might be supported by the Association and profession at large.

Dr. MORRIS (Spalding) thought the allusion to representation in the Council report was insufficient, seeing the important position taken by the Association amongst general practitioners. The representatives must be general practitioners themselves, for this branch of the profession had been too long ignored. He himself was at the service of the Association. He suggested that lists should be issued by the Council, and members should indicate those whom they preferred, the three names approved by the majority being selected. Unless some such steps were taken the election would be influenced by those already in power.

Mr. NICHOLSON (Hull) suggested that the Council should make the selection, and that the names selected should be suggested by the whole profession.

Mr. HUGH KER (Halesowen) said it was of the greatest importance to have a proper selection of candidates, and he suggested an alternative plan might be a ballot by the members present at the Brighton meeting.

Dr. DEAS (Exeter) questioned the desirability of this subject being introduced in a discussion on the Report of the Council; and Mr. V. JACKSON (Sheffield) thought the subject might be left to the Presidents of the Branches.

Mr. MARSHALL (Dover) asked about the expenditure for contributions to the journal, and suggested that the Association might take up the subject of medical protection, and the prosecution of unqualified practitioners as of greater practical utility than collective investigation.

The Report was then adopted, and Dr. CARTER gave notice of a resolution about the selection of candidates for the Medical Council.

Dr. WARD COUSINS moved an alteration of the bye-laws, so as to admit of the Colonial and Indian Branches being properly represented upon the Council. The matter was referred to the Council.

Mr. JOHN DIX (Hull), after failing to secure the postponement of the subject to the coming meeting, then moved a resolution referring to the Council the subject of the payment of the travelling expenses of the representatives of the branches to the meetings of the Council. The greatest possible sum thus required would not exceed £500, and he thought it was a mere act of justice.

Dr. DEAS seconded the motion, which was opposed by Dr. BRIDGWATER and Dr. EYTON JONES, and lost; but some confusion prevailed owing to the prolongation of the meeting beyond the hour fixed for adjournment.

The adjourned meeting took place in the evening. There was a large attendance. The proceedings commenced by Sir B. W. Foster introducing Dr. Nathan S. Davis, of Chicago, President-elect of the International Medical Congress.

The President (Dr. WITHERS MOORE) then delivered his address. After a few introductory remarks, in the course of which he referred to the meeting of the Association at Brighton thirty-five years ago, and the changes that had taken place, not only in the locality and in the Association since that time, but also in the science of medicine, he alluded to the great prevalence of indiscriminate gratuitous medical relief, and the question of medical fees. He then proceeded to the main topic of his address, which dealt with the higher education of women, meaning by the phrase an education "which aims at raising women (as it imagines) to the masculine level, by fitting them for the exercise of brain-power in competition with man." Is it good, he asked, for the human race that women should be trained and admitted to compete with men in departments from which they have hitherto been excluded by feeling and usage, and by legislation? Is such a competition demanded by the "rights of women," or by "justice to women"; do their duties admit of it? The old chivalrous ideal was different; it held that woman should be protected from the rude battle of life by the work and labour of man, but if this ideal is to be changed, then the age of chivalry and courtesy will pass away. Apart from this sentimental aspect of the question, he held that "it is *not* for the good of the human race, considered as progressive, that women should be freed from the restraints which law and custom have imposed upon them, and should receive an education intended to prepare them for the exercise of brain-power in competition with men;" for such a cause could only incapacitate them for their own proper function which nature has assigned them in the maintenance and progressive development of the human race. It will hinder those who would have been the best mothers from being mothers at all, or, if it does not hinder them, more or less it will spoil them, and no training will enable themselves to do what their sons might have done. He disclaimed any covert intention of proving that women are unfitted for the practice of medicine, for in many walks open to women—as music, literature, and the fine arts—none had been so distinguished as men, and the day is far distant when a Hippocrates, a Harvey, a Haller, or a Hunter will adorn the ranks of the lady doctors. As Herbert Spencer says, "The first requisite to success in life is to be a good animal; and to be a nation of good animals is the first condition to national prosperity;" and Dr. Moore contrasted the haphazard way in which in the case of the human animal conjugal union was arrived at, as contrasted with the care bestowed on such unions by the breeders of the inferior animals. Since, however, there can be no interference with individuals, there should be no attempts made whereby the fittest mothers should be shut out from motherhood. To encourage competition with man in the intellectual pursuits was to make vast demands on the vital powers, and *pro tanto* interfere with maternity and its duties. Education is very expensive, physiologically as well as pecuniarily, and growing girls are not physiologically rich enough to bear the expense of being trained for motherhood, and also that of being trained for competition with men in the severer exercises of the intellect. Again, the first ten years of life was the most important period of a man's existence, and how important it was that the mother should be fitted for the charge and training of her offspring at this period. Still

more wonderful than the change undergone by the new-born infant and the child of ten years were the changes that go to build up the organism in the period of gestation. All the tissues and organs are developed from the maternal substance. "Manifestly it is before his birth, mainly, that the man is made. From and after his birth he has mostly not to be made, but to grow; the making of him has been begun and carried on, and well-nigh completed in his mother's womb." How important then that she should be in such a vital state as to fit her for discharging duly the arduous functions of maternity. The detrimental influence of mental labour, in producing infertility and in damaging the physique of women, was illustrated by a statement of Herbert Spencer, and Dr. Matthews Duncan's opinion was cited that "amenorrhœa and chlorosis, and development of great nervousness, are frequent results of over-pressure in education at or near the important epoch—fifteen to twenty years of age. To the same cause I have often attributed destruction of sensuality of a proper commendable kind, and its consequent personal and social evils." The opinions of Sir B. Brodie, of Dr. E. H. Clarke, of Boston, of Drs. Emmett, Goodall and Lownes, and Mr. Lawson Tait, all express the same view. Dr. Moore, after alluding to other arguments in support of his contention, concluded as follows:—"But time admonishes me to make an end. My argument may be summed up very simply. Excessive work, especially in youth, is ruinous to health, both of mind and body; excessive brain-work more surely so than any other. From the eagerness of woman's nature competitive brain-work among gifted girls can hardly but be excessive, especially if the competition be against the superior brain-weight and brain-strength of man. The resulting ruin can be averted—if it be averted at all—only by drawing so largely upon the woman's whole capital stock of vital force and energy as to leave a remainder quite inadequate for maternity. The Laureate's 'sweet girl-graduate in her golden hair' will not have in her the fulfilment of his later aspiration—viz.,

> 'May we see, as ages run,
> The mother featured in the son.'

In the prophet's words, 'She will not have strength to bring forth'; her reproductive system will more or less have been atrophied; she will have lost her womanhood's proper power. With the power, she will have largely lost also the inclination; of 'Love's sweet want,' as Shelley calls it, she will know little, for, in Dr. Duncan's more matter-of-fact language, she will have lost 'sensuality of a proper commendable kind.' Unsexed it might be wrong to call her, but she will be more or less sexless. And the human race will have lost those who should have been her sons. Bacon, for want of a mother, will not be born. She who should have been his mother will perhaps be a very distinguished collegian. That one truism says it all—women are made and meant to be, not men, but mothers of men. A noble mother, a noble wife—are not these the designations in which we find the highest ideal of noble womanhood? Woman was formed to be man's helpmeet, not his rival; heart, not head; sustainer, not leader. Many times, indeed, woman's fate has set her in the foremost place; in some of those times, no doubt, such place has been well and grandly filled by her. Yet even then our admiration is not untinged with compassion. Even in this year of approaching or commencing jubilee, it is not so with us when we think of that Crown, Royal and Imperial, which, splendid as it is, has so long been left 'a lonely splendour'? 'Victoria Regina et Imperatrix'—bravely, proudly, gloriously is the burden borne; but would she, who knows its weight, wish a like weight to be laid upon any daughter? Let this address come back to the humbler life which more belongs to it. 'I am king of the household, and thou art its queen,' says the happy husband in Longfellow. Permit me to conclude to-day with King Solomon's eulogy for the happy home-queen, the happy wife. 'Who can find a virtuous woman? for her price is far above rubies. The heart of her husband doth safely trust in her; she will do him good and not evil all the days of her life. She rises while it is yet night, and giveth meat to her household, and a portion to her maidens. She girdeth her loins with strength, and strengtheneth her arms. She perceiveth that her merchandise is good, her candle goeth not out by night. She layeth her hand to the spindle, and her hands hold the distaff. She stretcheth forth her hands to the poor, yea, she reacheth forth her hands to the needy. Her husband is known in the gates, when he sitteth among the elders of the land. Strength and honour are her clothing, and she shall rejoice in time to come. She openeth her mouth with wisdom, and in her tongue is the law of kindness. She looketh well to the ways of her household, and eateth not the bread of idleness. Her children arise and call her blessed; her husband also, and he praiseth her. Favour is deceitful, and beauty is vain; but a woman that feareth the Lord, she shall be praised.'"

Dr. N. G. DAVIS (Chicago), in proposing a vote of thanks to the President for his able and interesting address, said that he cordially sympathised with its sentiments. There could be no room for doubt as to the truth of the statement it contained, and in America they had abundant evidence of it; when the laws of nature are set at defiance a fatal blow is struck against the welfare of the race.

The vote was carried by acclamation and acknowledged by Dr. Moore.

A motion by Mr. J. Marshall (Dover) respecting the publication of notices of births, marriages, and deaths in the journal—free of charge to members—was after a brief discussion referred, on the motion of Mr. Wheelhouse, to the Council.

The Second General Meeting was held on Wednesday morning, August 10th, Dr. Withers Moore, President, in the chair. The large hall was very nearly filled by the audience.

Sir B. WALTER FOSTER, President of Council, announced that although invitations had been received from Glasgow and Leeds for the meetings of the association in 1888 and 1889, yet no invitation had been received for next year. He therefore moved that the Council be requested to make arrangements for the annual meeting in 1887, and empowered to nominate a President-elect.

A number of foreign delegates were then introduced to the President, and received with applause.

The PRESIDENT alluded in suitable terms to the death of Dr. Austin Flint, who had cordially accepted the invitation to deliver the address in medicine at this meeting, and had prepared that address, which had since been published. The Council of the Association had invited Dr. Billings to take the place thus vacated.

Dr. Billings then delivered the address on medicine. (See p. 283.)

A vote of thanks to Dr. Billings for his address was proposed by Sir J. Crawford, Director General, seconded by Dr. Ord, and carried with great enthusiasm.

The list of Members of Council was read by the Secretary.

Sir B. W. FOSTER then announced that a prize of £20 had been awarded to Dr. Ward Cousins for the invention of a sound-deadener, and related the circumstances attending that award.

Dr. WARD COUSINS, in gratefully accepting the honour, announced that he would offer a prize of £20 for a subject which would be duly announced.

DIRECT REPRESENTATION OF THE PROFESSION.

Dr. CARTER (Liverpool) moved: "That it be an instruction from this meeting to the Council of the British Medical Association to select three names of gentlemen suitable for election to the General Medical Council by the medical practitioners of England, and to submit them to a future general meeting during the session of the Association in Brighton." He justified this course on the grounds that the time for selection was short; that to procure capable representatives it is necessary to have some organisation; and they could have no fear of leaving the selection to so representative a body as the Council of the Association.

Dr. EYTON JONES seconded the motion, the object being that general practitioners should be represented; and he suggested as one of the representatives the name of Dr. Waters.

Dr. HUGH KER supported the motion, but suggested that more names be proposed than required, and that the Irish and Scotch branches should take the matter up themselves.

Dr. DOLAN (Halifax) proposed as an amendment that it was inexpedient that the Association should interfere with the election, and that its action should be limited to affording facilities for the circulation of the names of candidates, with a view to get the opinion of members of the Association upon them. Dr. Carter's motion would, he said, place in the hands of a caucus the franchise for which they had so long struggled. He reminded them that the Association was not the only power that had moved to secure them

this right. THE LANCET had been working for years. Were they going to hand this selection to a body which might lead to the exclusion of so good a candidate as Dr. Glover? The question had been sprung upon the meeting. They must have general practitioners for their representatives, and not consultants, who are already amply represented.

Dr. MORRIS (Spalding) suggested that the selection could be made through the medium of the journal.

Dr. DUNCAN (Glasgow) objected to the Scotch and Irish representatives being disregarded.

Mr. G. BROWN (London) said the Association did not represent the profession, and insisted that candidates should come forward on their own merits, and not as nominees of any body.

Dr. ALDERSON thought that the machinery of the Association might be used for the election, but objected to placing the selection in the hands of the Council. He did not think a candidate should be excluded just because he was not a general practitioner.

Dr. CARTER explained that he had proposed to place the matter in the hands of the Council, because he felt it could be thoroughly trusted. But in obedience to the evident sense of the meeting, he withdrew his motion.

Dr. DOLAN'S amendment now being a substantive motion, was put to the meeting.

Dr. BERNARD O'CONNOR was engaged in speaking against the motion, when it was withdrawn by Dr. Dolan, and the meeting concluded with the result that no action will be taken at all in the matter.

In the afternoon a garden party was given by Sir Julian Goldsmid at St. Ann's Wells; and in the evening a brilliant conversazione was given at the Royal Pavilion by the President of the Association and the members of the South-Eastern Branch.

At the third general meeting on Thursday morning thanks to Mr. Humphry for his address in surgery were moved by Sir W. Mac Cormac, and seconded by Mr. Wheelhouse, and carried *nem. con.* Sir B. W. Foster then addressed the meeting in declaring the award of the Association Gold Medal to Dr. E. Waters for his long-continued and devoted labours in the cause of Medical Reform. The medal was founded in 1870, and has been awarded three times before, to Dr. Davies of Swansea, to Surgeon-Major Reynolds, and to the late Dr. Farr respectively. The President then presented the medal, and Dr. Waters acknowledged the award, which he said was a distinction which, of all others, he could most have desired. The Stewart prize was awarded to Dr. Robert Cory, for his self-denying research in vaccination, and the Middlemere prize was divided between Mr. G. Berry and Mr. Adams Frost. A delegation from the American Medical Association, including Drs. N. Davis, Brodie, Pancoast, Sinclair, and others, attended, and Dr. Davis, President-elect of the International Congress, gave a warm invitation to the profession of this country to attend the meeting at Washington in September, 1887. The delegates were most heartily received.

THE SECTIONS.

MEDICINE.

The first meeting of this Section was held in the Music-room of the Royal Pavilion on Wednesday afternoon. Dr. Broadbent, President of the Section, occupied the chair. The following subject had been selected for special discussion:—"Cases in which disease of the valves of the heart has been known to exist for upwards of five years without causing serious symptoms." Introduced by Sir ANDREW CLARK. From notes of cases coming under observation during the last fifteen years he brought forward certain points for discussion. He excluded from his tables all murmurs heard in the pulmonary area, all murmurs which were presumably variable, and what he called murmurishness. The cases had thus been repeatedly sifted. He noted 684 cases of valvular disease without symptoms showing how many persons must be going about with heart disease, and yet not suffering from it. There were also a large number of patients who suffer so slightly that they never consult a doctor, and thus the murmurs are perhaps never detected. Of the 684 cases the great proportion of 272 consulted him for indigestion, 57 on account of some rheumatic condition, 22 for gout, 44 for nervous ailments, 17 for eczema, and only 4 for phthisis. Lesions of the heart produced in youth were noticed to be greatly recovered from if development were not complete. He considered the Collective Investigation Committee were quite justified in taking up this subject, because town physicians do not know sufficient of the family and personal histories of these patients. It was the general practitioners who could supply the necessary information. He thought the Committee might take up those cases in which, though symptoms are experienced, the patient continues even to advanced life in a comfortable way. He described cases in which the valvular lesion was known to have disappeared. He drew impressions from these cases with reference to what favoured and what impaired recovery. He considered that impressions grew up with all of us into a clinical instinct, which, for the most part, served us well. Those who were exempted from the secondary effects of heart disease were those who placed themselves in favourable physiological conditions, especially with regard to the health of the mind, an absence of worry and disquiet. As disfavouring recovery, all disobedience to physiological laws, irregularities of living, especially eating and drinking. Many patients are over-fed by their anxious friends, and he considered that the abuse of tea, and especially of tobacco, weakened the ventricle. The failing strength of the ventricle was to be feared more than anything else. He concluded by referring to many cases which were proved to exist with valve lesions, and yet without symptoms, even to the extreme of life; others who have symptoms and yet live to advanced age; others, again, whose heart murmurs disappear. He considered that if this investigation were pursued carefully, it will do more than any other for the completion of the natural history of these diseases, and will render most important services to mankind.

Dr. GAIRDNER continued the discussion, and observed that his own impressions agreed very much with those Sir A. Clark had expressed. He referred to this subject in print twenty-five years ago, and said then, that there was a tendency to overrate the importance of murmurs, to pay too much attention to sound rather than the circumstances, and to take too serious a view of cardiac murmurs and disease generally. He recorded nine cases illustrating the more favourable prospects than usually admitted in this class of cases.

Dr. CLIFFORD ALLBUTT laid stress upon whether the cause of the valve disease was intrinsic or extrinsic. He considered dietetic considerations very important, and alluded to the great weakening effect of alcohol upon the muscle of the heart. He thought that with alcohol the mischief was essential; with tea and coffee, the effect, being produced through the nervous system, was readily recovered from. He believed that a noisy murmur was not often a serious one, and that the important point was whether any alteration occurred in the current of blood. He drew attention to the danger of sudden death always existing with aortic regurgitation, whereas the occurrence of acute dilatation with mitral disease was recovered from. He concluded by observing that this discussion ought to comfort physicians who were outliving the pathological era in which they were first trained, and which placed too much importance upon organic changes.

Dr. BRISTOWE did not doubt that occasionally organic murmurs do disappear. He recorded a case in which heart disease existed for forty-five years, and others of aortic obstruction which had existed a long time in fair health. The loudness of a murmur was not a criterion of its seriousness. He thought doctors often discovered heart disease when the patient knew nothing previously about it, and made them miserable. He referred to Murchison having died in harness, and said he would often recommend others to run the risk also.

Dr. LEACH, in referring to the treatment in these cases, asked whether we should advise patients to do nothing and keep quiet, because they have no murmur; or go to the other extreme, with some German authors, and advise mountain climbing and severe exercise. He thought it was not wise to consider a man with heart disease as equally favourable for insurance as one without.

Dr. BOWLES considered that for collective investigation purposes we must not disregard temporary murmurs. They have had an important meaning. We were, perhaps, apt to attach too much importance to them in our prognosis.

In summing up, Sir ANDREW CLARK said, that in considering a case for life assurance he weighed these facts—the time the mitral disease must have existed; whether independently of disease of the heart-walls; whether in

existence for over two years; whether associated with attacks of negative congestion; whether the general health was good, and whether there was a fair radial pulse. Murmurs must be considered in their relation to the general health, and the condition of the heart-wall.

A vote of thanks was passed to Sir A. Clark for opening this discussion.

SURGERY.

Mr. ERICHSEN, President, in opening the section, spoke on the tendency of modern surgery—i.e., the lines that it will be most profitable to follow in the immediate future by those who seek to advance surgery beyond its present limits of undoubted excellence. Will, he asked, these lines be the same as those along which the present generation of surgeons has successfully carried it to so high a pitch of excellence, or will the very success that has attended their efforts in these directions compel a new departure? Have we, in fact, reached the final terminations of the old routes, and must we follow, if not new, at least less well-explored tracks if we wish to reach a uniformly higher level? "Before answering these questions, let us consider the direction in which surgery has advanced since the introduction of anæsthetics, from which epoch I would roughly date the development of what is now known as 'modern surgery.' And here I speak only of surgery proper, not of those questions in diagnosis and pathology which are common to it with the other departments of medicine. This advance has been in three distinct lines. First, and mainly, in the extension of the scope, and in the improvement of the methods of operative surgery. Secondly, in the precision both as to exactitude of performance and certainty in the result of operations. Thirdly, in the application of those methods of scientific research by which those sciences are advanced on which practical surgery is based. The extension of operative surgery since the introduction of anæsthetics is certainly one of the most remarkable phenomena even of this mechanical age. It cannot have fallen to the lot of many of you to have been personally engaged in surgical operations in the pre-anæsthetic period, but to those who, like myself, were then well acquainted with the operating theatres and the wards of the London and of some of the Continental hospitals, and who can carry our minds back to what we should now call the horrors, both as regards physical suffering and total absence of hygienic precautions, of those days, the change that has come over the whole field of operative surgery is more than startling. That the final limits of surgery have been reached in the direction of all that is manipulative and mechanical there can, I venture to think, be little doubt. Within these limits there may be much of movement, of change, of modification in the 'technique,' if I may borrow that word from art; but movement is not necessarily advance, it is often the mere restlessness engendered by dissatisfaction with established methods; change may be the outcome of mere personal vanity, or of more unworthy motives..... But another great advance that has been made in modern surgery is in its precision. Now, there are two kinds of precision, there is the precision which consists in exactitude of performance and the precision which consists in certainty of result. So far as exactitude of performance is concerned, there is little left to be desired in modern surgery. The rules laid down for most operations are so precise that the surgeon can hardly err, the more so as the use of anæsthetics by rendering the patient insensible to all suffering makes it unnecessary to operate against time, a cause of much fatality in former days, and the use of Esmarch's bandage renders the limb as bloodless as if it were in the dissecting room. Almost absolute precision of result has also been obtained, so far at least as the wound is concerned by the employment of strict hygienic precautions and the adoption of the antiseptic method in one or other of its various modifications. Precision of result, so far as recovery is concerned, is less certain; but here also the gain has been immense, and so great has the advance been, that instead of looking upon any given operator as having a definite rate of mortality, often high, we now look upon death after operation, and as the direct result of the operation, as a rare contingency, and one to be carefully inquired into..... The development of those methods of scientific research by which those sciences are advanced on which the practice of surgery is based is the next point to be considered, and here we come to ground that has been less assiduously cultivated than other fields of surgery, but which certainly may be expected to yield a fruitful and abundant harvest in the future. It may, in truth, be doubted whether there is really a 'science of surgery' in the sense that we attach to the word 'science' when applied to other departments of human knowledge, the observation of natural phenomena, collections of facts governed by and subordinated to certain fixed laws. We should be more correct in saying that surgery is based on certain of the natural sciences, such as those of biology, anatomy, physics, and chemistry, and on pathology. The art of surgery has been in no way dependent for its advance in the past on the cultivation or the progress of science. There was a highly advanced empirical art of surgery long before the natural sciences existed as such. The art has ever been in advance of the science, and the science has too often had to content itself with giving a rational explanation of the phenomena already determined by the art of surgery..... Art is final, but science is illimitable. We have reached finality in the mere mechanical art of surgery, both as to expansion of its limits and the precision of its practice. But we are yet on the very threshold of the science of surgery. We have yet to learn much from that compound science biology, in its application to the elucidation of surgical problems, that compound science of modern creation into which physiology and histology, pathology, chemistry and physics, enter in equal proportions, which works by means of experimental research, and I venture to think that this is the line of investigation which promises the greatest and most useful results in the cultivator of surgery in the immediate future. The old lines also of ordinary clinical observation and of dead-house pathology have long since been followed to their final termination; we can but multiply the facts already so carefully observed, and so admirably recorded by countless observers in every civilised country. It is not by following these old lines that modern surgery will owe its advance, but it is in the application to it of those means of experimental research which are now being worked out in the biological and pathological laboratory that we may hope to find the solution of many of those problems that have hitherto baffled the surgeon."

Sir HENRY THOMPSON then opened the discussion on Supra-pubic Lithotomy. Being strictly limited, he said, he would condense his remarks as much as possible, and limit himself to the discussion of the best manner of removing large stones in adults. Formerly it was a choice between lateral or median lithotomy, with a few cases for lithotrity. Now, the latter operation was universally selected for nine out of every ten cases, and it was a question how the remaining case should be dealt with. Lateral lithotomy seemed a simple and an expeditious operation for a looker-on, but for those who had access to the wards it was a fatal operation as formerly practised. In the earlier part of his career he had tested the several methods, and the contrast between any method of lithotomy and of lithotrity was very striking. In removing a large mulberry calculus through the perineum more severe must be the injury to the neck of the bladder and to the prostate. Cheselden had had remarkable success for small and medium-sized stones in children, and this was probably the best operation he could have done, seeing that crushing had not then been invented. But to-day the situation was completely changed. The supra-pubic operation was well adapted for medium-sized and for large stones, because the space is practically unlimited; because there was no danger of hæmorrhage, or, if it occurred, it was easily dealt with; because the incision was easy to make and quite safe; because the after-treatment was easy, and the use of antiseptics possible; and finally, because neither rectum nor sexual organs were in any way interfered with. It had, however, been argued that there were some dangers, notably two—the peritoneal cavity might be opened, or there might be extravasation of urine into the surrounding cellular tissue. Dealing first with the latter, Sir Henry pointed out that this could hardly occur if the rules of procedure were at all carefully carried out. It was conceivable that extravasation might occur if the tissues were much disturbed. This would be likely to follow if the bladder, not being properly supported, should tend to recede back into the pelvis as its contents flowed out after it had been incised; hence the importance of carefully fixing it before the incisions were made into it. Then, as regarded the peritoneum, this danger need not occur. Garson's experiments, amply confirmed by Petersen and others, showed the value of rectal distension; and, besides, the floor of the bladder could be seen when it was

well raised out of the pelvis by a distended rectum, and this was a great advantage, especially when operating for tumour of the bladder. Sir Henry next described the details of the operation (now very generally known through his *brochure* on this subject). He thought there was no advantage in suturing the bladder; it was better to leave it open in order to effect drainage, which a catheter in the urethra failed to accomplish.

Mr. REGINALD HARRISON (Liverpool), for Dr. Morrison, showed a large uric acid calculus (the largest on record) which had been removed by this method: a pair of midwifery forceps had been used for its extraction. For himself, he spoke with reserve on this supra-pubic operation; he had operated on about fifty children by the left lateral method without losing a single one, and he should hesitate about changing his practice until circumstances convinced him that he could improve on his present results. To judge from the recorded experience of others, lateral lithotomy had proved a difficult operation, and for such men the easier one would doubtless be welcomed. For stone cases, however, attended with complications, such as sacculation or cystitis, he felt sure that the perineal method would prove the better and the more satisfactory.

Mr. CADGE (Norwich) would prefer to take a midway course between Sir Henry Thompson, who went for the operation, and Mr. Harrison, who condemned it. Perhaps on account of his old associations and prejudices, he (Mr. Cadge) was apt to see difficulties where others saw none; perhaps, too, he was reluctant to let the older operation lose the place of honour it had so long occupied. Nor could he forget that Cheselden had abandoned it, and never returned to it. But at present it was impossible to lay down any principles on which it could rest; the aggregate experience of all surgeons hardly amounted to 100 or 150 cases. As regarded the wound, he was rather in favour of leaving it open; at most, perhaps, one or two stitches, for the sake of securing coaptation, might be desirable. He then referred to cases quite unsuited for the supra-pubic operation—cases of contracted bladder. He would advise that surgeons keep their minds open, carefully experimenting on the dead, and cautiously practising the operation in suitable cases on the living.

Mr. JESSOP (Leeds) related an interesting case, in which he had quite failed to grasp the stone with the lithotrite, but quickly extracted it by the supra-pubic method. He was much disappointed with Sir Henry Thompson's opening paper. It contained nothing new, nothing that had not already been published at least twice before. He had been hoping to learn the cases in which Sir Henry would advise this operation before any others. How would he or Mr. Cadge deal with a moderate-sized stone in persons with enlarged prostate? Then, as regards children: he confessed that in a small child lateral lithotomy was a difficult operation; on the other hand, the bladder in children lent itself readily to the supra-pubic method.

Mr. BARWELL spoke in favour of the operation, both for boys and girls.

Dr. WARD COUSINS (Plymouth) seemed perfectly satisfied with the old-fashioned lateral lithotomy for small and median stones. With improved tools, lithotrity bade fair to take its place. Nevertheless, supra-pubic lithotomy was a very easy operation.

Surgeon-Major KEEGAN (India) showed a remarkable series of stones removed from children by crushing and rapid evacuation. There were 58 consecutive cases, with only one unsuccessful result. Some of the stones were very large indeed. The average stay in hospital amounted to 77 days. He therefore advocated this operation in preference to any other, unless specially contraindicated for stones of a certain size. The question was, where should the supra-pubic method come in? He thought for all stones weighing about 4 oz. and upwards. As a proof of the success of lateral lithotomy, he referred to the published results—143 consecutive cases—of his friend Dr. Freer, without a single death.

Sir WM. MAC CORMAC related a case in point, with primary union of the incisions.

Mr. JACOBSON related three recently operated cases, and advocated the operation for its own sake. He referred to the frequency of relapse after lithotrity; once in seven or eight cases (Cadge), as compared with one in fifty cases after lithotomy. There were the relapses of the leading operators; in less skilled hands they would probably be more numerous. Hence this was a strong argument in favour of the easier method. This, the supra-pubic operation, was evidently the operation for country surgeons, where want of opportunity lost them something of the facility which more experienced surgeons were constantly acquiring. He had not used sutures, and rather inclined not to do so. He should very much like to know something of the personal after-history of those who had been cut for stone while young. What were the real facts as regards the emasculation which was asserted to follow in a proportion of the cases?

Mr. BRUCE CLARKE made some observations on the use of the rectal bag. In a case at which he had assisted no inflation was necessary; the size of the stone sufficiently raised and distended the bladder.

Dr. HINGSTON (Montreal), as a pupil of Civiale, felt that lithotrity ought in adults always to take the place of lithotomy when practicable. In children lateral lithotomy is so simple, so easy, that he failed to see why anyone should desire to adopt new procedures. He recommended that the size of a stone should be indicated rather than its weight, as the latter could only be ascertained after its removal. For stones three ounces and over he would be inclined to try the supra-pubic method.

OBSTETRIC MEDICINE.

The President, Dr. ALFRED MEADOWS, F.R.C.P., on taking the chair delivered an address. In his opening remarks he offered, in the name of the Association, a welcome to all, and referred especially to those whom, though foreigners in a national sense, we are proud to regard as brothers, whose lives are spent in and whose hearts are devoted to the study of obstetrics and gynæcology. Reference was next made to the growing differentiation on the subjects of which this Section has cognisance. More and more evident each year is the divergence which is springing up between obstetrics and gynæcology, and the opinion was strongly advanced that in future there should be two sections for their consideration, and if that were so it would be to the advantage of both; certainly to gynæcology. Many gynæcologists are not obstetricians. Neither are many practitioners of the obstetric art gynæcologists. The advances which have been made and the brilliant achievements which have been wrought in the practice of gynæcology during recent years have placed this department in the foremost rank of surgical art, and if we look up and down the history of surgery during the last quarter of a century it would puzzle anyone to find a parallel to the chapter which may have been written of the abdominal surgery introduced by the gynæcologist. "Nowhere is there such a record of life saved, of suffering averted, of health restored, of happiness secured, as is inscribed on that tablet of time which the knife of the gynæcologist has carved in letters of indelible characters." Allusion was made to the subject to be introduced by Dr. Barnes, "The Alternatives to Craniotomy," as likely to mark an epoch in this country, and will lead to a new departure by which many lives will be spared, and the conscience of the obstetrician will in the future be made happy by the promulgation of a new law which will save his hand from becoming an instrument of slaughter; for the resources of civilisation cannot be exhausted until some means are found out by which in every case of labour we may with reasonable chances of maternal safety extract a living and viable child from the mother. Porro's operation has undoubtedly advanced abdominal surgery, and is a great improvement upon Cæsarean section, and it has this merit, that it insures the mother against a repetition of the peril in which pregnancy places her. A subject not less inferior is the one frequently spoken of as "The Removal of the Uterine Appendages," but if this term is the best that can be selected it expresses a physiological error, for the ovaries and the Fallopian tubes ought not certainly to be regarded merely as appendages to the uterus, but rather that the uterus is an appendage to the other organs, which are undoubtedly its superior in physiological work. One point, however, is clear, that their removal is becoming—if it has not already become—one of the most startling innovations in modern surgery, and it is likely to occupy professional attention for many years. Dr. Meadows thoroughly believes in the sound and scientific basis upon which the operation is founded, and that it is a valuable addition to our methods of curing certain cases of ovarian and tubal disease which are beyond the reach of therapeutic remedies. And he en-

dorses the view of its applicability to certain forms of nervous diseases which have hereto resisted all attempts of cure by means of drugs, even when these so-called appendages are the seat of any cognisable disease, and lastly, by this operation, the sufferings caused by the presence of certain forms of uterine fibromata may be entirely removed, the growth of the tumour be thereby arrested, and its disappearance in some cases effected. Again, in women who are the subjects of such pelvic distortion that the birth of a living child *per vias naturales* is an impossibility, it may be a question whether the removal of the ovaries and Fallopian tubes ought not to be undertaken. In a final allusion to this operation a word of caution was uttered lest the facility with which it can be performed should tempt practitioners to be too lavish in the selection of the cases alleged to be fitting; greater perfection in diagnosis was also required, and it was possible to lose sight of the fact that there is such a thing as medical treatment, both topical and general, and that *not* every case of disease of this appendage must necessarily come under the radical treatment of the knife.

Dr. BARNES read a paper on the Alternatives of Craniotomy. He said: "I will submit the following summary of the arguments set forth:—1. The legitimate aspiration and the tendency of science is to eliminate craniotomy on the living and viable child from obstetric practice. 2. The advance of hygienic rule, the improvements, the forceps, in turning, in the induction of labour, and in obstetrics generally, have materially curtailed the field within which craniotomy can be justifiably applied. The extension of the axis-traction curve to the forceps will, I believe, still further curtail the resort to craniotomy. 3. In the most extreme degrees of pelvic distortion, where delivery *per vias naturales* can only be effected by the best appliances and the highest skill, and with appreciable risk to the mother, Porro's operation is the legitimate alternative for craniotomy, if the opportunity of inducing abortion be gone by. 4. In less advanced degrees of pelvic contraction, but still incomparable with the delivery of a living child *per vias naturales*, the opportunity of inducing abortion having gone by, the Cæsarean section may be a legitimate alternative of craniotomy. This is the most debateable point. 5. In the minor degrees of contraction, say from 3 in. to 3½ in., the opportunity for inducing premature labour having gone by, the far greater safety to the mother obtained by craniotomy makes this the proper course to adopt—at least, until it can be shown that the Cæsarean section is so improved as to be equally safe to the mother. The mother's right to be rescued stands before that of the child. 6. In other emergencies than deformity, as in obstructed labour from ovarian tumours, the alternative to craniotomy, if possible, is to remove the tumour. 7. In cases of immovable tumours, Porro's operation is the proper alternative. 8. In ruptures of the uterus, the child being delivered or not, Porro's operation is the proper alternative. The interests of mother and child coincide. 9. In cases of disease or tumours of the uterus, Porro's operation will generally be the proper alternative. 10. In atresia of the cervix or vagina craniotomy or Cæsarean section may be necessary, but incisions and dilatation may more frequently be the proper alternative. 11. When obstruction is due to hydrocephalus, or dropsy in the child embryotomy or tapping is indicated. 12. When the child is dead embryotomy is indicated, and decollation when turning is hazardous from impactions of the child. 13. In convulsions and hæmorrhages the proper alternatives for craniotomy are found in the more scientific methods of concluding labours under these complications. Lastly. But the dream of Tyler Smith, the abolition of craniotomy, will be fully realised only when hygiene shall have triumphed over disease and deformity.

PUBLIC MEDICINE.

At the opening of this Section Dr. R. P. B. TAAFFE, President, selected two or three points for discussion, the first being Smoke Abatement and Purification of Gas. He urged the necessity for a strong effort being made to reduce the amount of smoke which was daily given off in every town, and he suggested that every occupier of a house should be required to exchange at least one old-fashioned stove for a smoke-consuming stove in every year. He next described Mr. W. J. Cooper's method for purifying gas, and he expressed the hope that this process, which is being successfully employed at Tunbridge Wells, will be made compulsory in all gas-works by the Legislature. The decrease in the death-rate during the decade 1871-80 was next touched upon, and it was pointed out that this rate, amounting to 21·7, was lower than in any preceding decennium since civil registration began. During the current decade the average death-rate is still lower, being only 19·3, a result which, as Dr. Ogle says, is due to the effects of the ever-increasing efforts to improve the sanitary condition of the country. The results of this decrease, as affecting prolongation of life, was then discussed, and it was shown that this amounted for every male to an increase of more than two years. The death-rates of the borough of Brighton have declined 2·7 per 1000 since 1851-60, and those of Kemp Town, Preston, and Hove were during 1885 as low as 14·1, 12·9, and 12·5 per 1000. The lecturer then proceeded to show the extent to which the public misunderstood the death-rates in the weekly returns of the Registrar-General—mistakes which were shared in by Doctors of Divinity and a Fellow of the Royal Society; and he pointed out with much exactness the meaning of the Registrar-General. Infantile diarrhœa, which was next commented upon, was attributed mainly to improper feeding and improper nursing, and he expressed the opinion that even infants at the breast may be improperly fed by a too frequent supply. Diarrhœa amongst the children of the poor is much more common and fatal than among the children of the rich, and this is due to the larger number of poor children who are brought up by hand, the uncleanly condition of feeding-bottles, and the difficulty of obtaining medical advice. Dr. Taaffe considered the mortality from autumnal diarrhœa occurred as the result of the stomach and bowels being in a state of subacute congestion for months previously, that the climatic and other epidemic influences at this period act secondarily in determining the disease. After a brief reference to Mr. Power's investigations into the outbreak of scarlet fever in connexion with milk from Hendon, Dr. Taaffe gave some account of recent legislation, and spoke of the rapid growth with which the education of the public on sanitary matters had progressed, indicating the directions in which the law should be amended, and finally urged the improvement of London government on such a basis that example might be set to the rest of the kingdom.

PATHOLOGY.

The PRESIDENT (Julius Dreschfeld, M.D.) delivered an opening address on the Relations of Pathology to the other branches of Medical Science, and on the Study of Pathology in England compared with other countries. Of the subdivisions of the subject, the anatomical, physiological, and etiological, the first named and oldest has received the largest share of attention. It may be said to have been founded by John Hunter, who bequeathed to England a museum superior to any in Europe, and which, thanks to the labours of Sir James Paget and his able fellow-workers, has been richly supplemented and kept pace with the advancement of pathological science. The advances in histology had their application in pathology—e.g., the discovery of karykinesis and the reaction of cells and tissues to special colouring agents, as developed by Ehrlich. Pathological anatomy also enables us to trace the steps of diseased processes, and how to arrive at their cause; and the history of tuberculosis shows how this may anticipate the discoveries of experimental science. This latter line of research—pathological physiology, the importance of which was recognised by Hunter,—is hampered in this country. It receives much support from experimental physiology, and in pathology experiment is even more needed than in physiology—as in the study of inflammation, thrombosis, and fever,—and the whole field of bacterial pathology. Dr. Dreschfeld showed how the legislative restrictions in this country placed experiment on the action of poisons under great difficulties, and he illustrated this by the loss of an opportunity to verify Pasteur's assertions on hydrophobia in a case recently in the Manchester Infirmary. The patient died two days after admission, and there was consequently no time to apply for the necessary licence to perform the inoculation experiment with the fresh medulla. He urged that in the interests of humanity, as well as of medical science, these anti-vivisection restrictions should be relaxed, and thought a fresh appeal might not be altogether fruitless. But pathology also gains much support from clinical medicine—witness the pathology of nervous diseases, which has made such enormous progress

in the last ten or fifteen years, owing largely to M. Charcot. And not only pathology, but physiology, has gained by these observations. The pathology of Bright's disease can only be elucidated by continued clinical and anatomical investigation; and there are many affections—notably increased arterial tension, digestive disorders, hysteria, &c.—where clinical observation is the chief means of research. Pathology thus covers a large field, too large for one man to devote himself to all parts of it, although much of our pathological knowledge has been due to clinicians; and, conversely, most of the excellent clinicians of England have spent their earlier years in pathological work and pathological research. We require well-endowed chairs of pathology in all teaching centres, and a separate recognition of the subject by examining bodies. It would better prepare the student for his clinical work, and be of the greatest advantage to him afterwards in the exercise of his practice.

A discussion upon Peripheral Neuritis was opened by Dr. ROSS (Manchester), who restricted the subject to that of progressive multiple neuritis, the chararteristic of which is its resemblance to diseases produced by poisons circulating in the blood. These toxic causes he summarised in the following groups:—1. Lead, arsenic, copper, &c. 2. Alcohol, bisulphide and oxide of carbon, and perhaps the pains due to prolonged excess of chloroform and chloral, and advanced diabetes. 3. Animal poison, diphtheritic paralysis, syphilis (Buzzard), and many specific fevers; leprosy, and perhaps pemphigus and herpes; very probably also rheumatism and rheumatoid arthritis. 4. A certain number of cases appear to be idiopathic. He described the various symptoms—motor, sensory, trophic. The motor paralysis is of the ordinary atrophic variety; reflexes variable. The extensors chiefly affected—e.g., lead palsy. In alcoholic paralysis there is first double ankle-drop, then double wrist-drop, &c. Ocular paralyses occur in diphtheria and in alcoholism. The diagnosis had to be made from cerebral disease. No doubt several cases of so-called acute ascending paralysis were really of this class; and the distinction can be made by noting that when the hands are involved the muscles supplied by the first dorsal nerve will (unlike spinal paralysis) be attacked after those of the cervical nerves. Death takes place by respiratory paralysis. The gait is quite characteristic, with pointed depressed toe and semiflexed knee.

Dr. BUZZARD followed. He described the histological changes of the neuritis, changes which embraced degenerative as well as inflammatory processes, and exhibited specimens. The limitation to periphery of so many nerves is startling, and suggests some unrecognised lesions in the centre. Duchenne suggested functional disorder of the cord, and the same idea has been further advanced by De Watteville and Erb—that the nerve cells are deranged. But if functional activity of the cord were long suspended the paralysis should be more widespread. Dr. Buzzard suggested that the nerves may be affected through bloodvessels supplying them through irritation of vaso-motor centres. The phenomena of Reynaud's disease are attributed by Peters and Vaillard to peripheral neuritis, but Dr. Buzzard regarded the neuritis as secondary to the altered state of the bloodvessels due to poison acting on the vaso-motor centre. The explanation should be wide enough to embrace the peripheral lesions which arise in chronic diseases of the spinal cord—e.g., tabes. Dr. Buzzard related some cases, and referred to diphtheria, beri-beri, and other diseases, due apparently to specific poisons, which are more or less strongly marked by the symptoms of peripheral neuritis.

Professor CHARCOT said the clinical aspect of the subject mainly interested him. In lead paralysis we have wrist-drop; in alcoholic paralysis, foot-drop. In alcoholic paralysis, sensibility was affected in high degree and flying pains, not in lead paralysis. We are far from understanding the true pathology of this state, which we connect under the term peripheral neuritis. Diphtheritic paralysis, kakke, &c., are different from the other forms. In locomotor ataxy there is very often a peripheral neuritis, and it is not possible to confound this with alcoholic paralysis. There is no real difference between tabetic gait and that of alcoholic paralysis, and it is certain that what has been called peripheral tabes is alcoholic paralysis and nothing else.

Professor BROWN-SÉQUARD said that the vaso-motor nervous system has not so much power as we have for long imagined. We know now that the nervous system can influence nutrition by producing a direct chemical change. We knew gangrene was due to nervous changes, joint disease, &c., which we cannot attribute to the vaso-motor system. In an apoplectic patient we may find arteries beating with undue violence—a power of attraction; in collapse the cessation of interchange between blood and tissue, the venous blood assuming the colour of arterial. By certain substances the colour of blood may be changed in one half of the body, evidently through action of the nervous system on tissue. Inhibition can produce a cessation of activity in a vaso-motor nerve, or in a sensory or motor nerve; and outside the nervous system—e.g., a secretion—its power is much more various than we suppose. Under the term "dynamogeny" Professor Brown-Séquard has studied an increase of power by changes in the nervous system. All these things should be taken into account in studying neuritis.

Dr. GREVES (Liverpool) mentioned on behalf of Dr. Glynn two cases lately under the care of that gentleman, in both of which there was distinct evidence of neuritis, particularly affecting the cutaneous nerves of the lower extremities; and in one case there were granular kidney and cirrhosis of liver.

Dr. WHITTLE spoke of the clinical features of some traumatic cases—one in which a neuritis followed subcoracoid dislocation of the humerus. It followed the course of the musculo-spiral nerve, and produced rapid atrophy of the muscles. Another was a case of severe pain in the foot and leg, in a case of ingrowing toenail; the pain was intensified by the operation, and followed by muscular atrophy.

Dr. B. N. RAKE (Trinidad) read a paper upon the Distribution of the Leprosy Bacillus, the blood and tissues being widely examined. In no case were they found in the blood. He also described some experiments on the communicability of leprosy to animals by inoculation and feeding. The subcutaneous method was the best. The cutaneous tubercle is used, and introduced beneath the animal's skin, bacilli having been found in the tubercles employed. All the experiments yielded negative results, but differences were noticed between the results in mammals and birds, no absorption of the tubercles taking place in the latter. Dr. Rake exhibited specimens illustrating the neuritis of leprosy.

Dr. CROCKER said that Unna had observed the presence of bacilli in the cells, which had been quite disproved by Hansen, Neisner, and Toulon; but it was still an open question whether the bacilli find their way into epithelial cells. Dr. Rake's observation of paucity of bacilli in anæsthetic leprosy accords with the view of its non-contagious character. Dr. Crocker showed drawings illustrative of the anæsthetic, tubercular, and mixed form of leprosy.

Dr. CROCKER read a paper on the Anatomy of Keloid in an Early Stage. The tumour was from a man aged thirty-three, who had also multiple fibromata. The duration of the keloid did not exceed three weeks; it lay close to the site, and consisted of two unequal lobes. The tumour was surrounded by a fibrous capsule, and was divided up into lobules by bloodvessels which permeated it; the interval between the vessels being filled by a network of fibrous tissue. Laterally and below the reté the vessels were surrounded by leucocytal infiltration. The vessels became atrophied and converted into bundles of fibrous tissue. Anatomically the two kinds of keloid—true and false—are identical. The frequency of so-called "spontaneous" keloid over the sternum is attributable to liability of this region to injury. One point is the distance to which the bloodvessels are surrounded by tissue cells; thus explaining liability to recurrence, and need for wide excision.

THERAPEUTICS AND PHARMACOLOGY.

THE Address in the Section of Pharmacology and Therapeutics at the meeting of the British Medical Association at Brighton was delivered by Dr. LAUDER BRUNTON, F.R.S., who selected as his subject the "Connexion between Chemical Constitution and Physiological Action." He compared the advances which had been made in the art of treatment to the progress of civilisation as indicated by the nature of the tools or weapons employed in different ages. In the first, or Paleolithic age, man employed weapons or tools of flint, roughly chipped into shape and unpolished. In the next, or Neolithic age, the implements consisted of stone, but they were polished. The next age is characterised by the employment of bronze as a material, and the fourth and highest stage by the use of iron. In a similar manner four stages were recognisable in the development of the instruments used in the treatment of

disease. In the first stage crude drugs were employed prepared in the roughest way—such, for example, as powdered bark or metallic antimony. In the next stage these were converted into more active and manageable forms, such as extracts or solutions. In the third stage the pure active principles, separated from the crude drugs, were employed, such, for example, as morphine or quinine. In the fourth stage an attempt was made to manufacture artificially substances possessing the exact physiological action and uses required. This last stage, the iron age of pharmacology, may be said to have opened some twenty years ago, when Professor Fraser and Professor Crum-Brown of Edinburgh demonstrated the connexion between physiological action and chemical constitution, and inaugurated a new era in pharmacology. They found that by modifying the chemical constitution of strychnine they could alter its physiological action and convert it from a poison which would tetanise the spinal cord into one which would paralyse the motor nerves. At the same time that Crum-Brown and Fraser were making these experiments, Schroff in Vienna and Jolyet and Cahours in France independently arrived at somewhat similar conclusions. It would be impossible to enter fully into all the recent developments of this branch of research, but it would be of interest to review briefly what might be said to be the present position of the question. Nitrogen is a substance peculiar in this respect, that it possesses sometimes three and sometimes five "affinities," using the term in the sense in which it was employed by the scientific chemist. When combined with hydrogen in the form of ammonia or of ammoniacal salts, it affects nerve centres, motor nerves, and muscles, tending first to stimulate and then to paralyse them. But, as might be expected, the effect of the ammonia is modified by its combination with iodine, chlorine, and bromine; and it is found that while the ammonium-chloride generally attacks the spinal cord and causes irritation, ammonium-iodide paralyses the motor nerves and muscles. When nitrogen has oxygen combined with it in place of hydrogen, so as to form nitrous acid, its action is exerted more especially upon the blood and bloodvessels, so that it causes the blood to become chocolate-coloured and the bloodvessels to dilate. This power of dilating the vessels is sometimes exceedingly useful in the treatment of disease; and we are enabled to vary the action of our drugs so as to attain, to a great extent, the end desired, by our knowledge that the action depends upon the nitrous acid, and not on the substance to which the acid may be attached. Thus, where rapid dilatation is desired, nitrite of amyl is used; but where a slower and more prolonged action is desirable, nitrite of soda or nitroglycerine is employed. Carbon, again, is a substance with four affinities, while nitrogen appears sometimes to have three and sometimes five. When the nitrogen and the carbon are united in such a way that four affinities and each are connected together, leaving one free affinity belonging to penferd nitrogen, the compound is exceedingly poisonous; whereas when the free affinity belongs to the carbon and the other three affinities are joined to triad nitrogen, the compound is comparatively innocuous. This illustrates strikingly how very important the nature of the free affinity in the compound is in relation to physiological action. In the series of chemical substances to which alcohol belongs an illustration of a very striking kind is afforded. Here the carbon atoms are attached to each other by one affinity, so that each terminal atom has three affinities and the intermediate atoms two affinities unattached. All the alcohols attack the nerve centres and paralyse the brain—the spinal cord and the centres of organic life in the medulla oblongata. Primary propylalcohol, where the hydroxyl is attached to the terminal link, so to speak, appears to produce steadily increasing paralysation of the nerve centres; but secondary propylalcohol, where the hydroxyl is attached to an intermediate link, stimulates the nerve centres before it paralyses them. The whole of the carbon compounds, formed on the principle of an open chain, appear to have an action more or less like that of alcohol, though these are modified by the nature of the substances which "tip," as it were, the free affinities of the carbon links. Thus, marsh-gas, alcohol, ether, chloroform, bromoform, and iodoform, all tend to paralyse nerve centres, and to exert an anæsthetic action; but the chloral in the chloroform tends to make the substance paralyse the heart more quickly than marsh-gas, alcohol, or ether, which contain hydrogen alone or hydrogen and oxygen; and in iodoform the effect of the carbon is to a great extent swamped by the iodine. It is to Liebreich's recognition of the fact that similar carbon compounds possess a similar anæsthetic action that we owe the discovery of chloral. The knowledge of the depressing action of chlorine in such compounds upon the heart led Schmiedeberg and Cervello to search for a hypnotic substance which should not contain chlorine, with the result that paraldehyde has been added to our therapeutic *armamentarium;* and the stimulant action of ammonia led Schmiedeberg to introduce a new hypnotic, urethan, which, like chloral, will produce sleep, but, instead of weakening, will stimulate the heart, and is thus admissible in cases where chloral might be dangerous. Another good illustration is afforded by the other group of carbon compounds which is termed the aromatic series. It differs from those of the fatty groups, inasmuch as they tend to stimulate the nerve centres and produce spasms or convulsions before stimulating them. The most marked property which they possess is the power of reducing temperature, and of destroying low forms of animal life, so that they act not only as antipyretics, but as antiseptics. In the open chains of the fatty series of carbon compounds the increased number of links appears to increase the activity of the compound, and a condition which is similar in some respects is to be found in the aromatic series. For example, in phenol or carbolic acid, as it is commonly called, there is one hydroxyl terminal, just as in ordinary alcohol, the other carbon affinities being saturated with hydrogen. When these hydrogen atoms are replaced by methyl the antiseptic power of the phenol is increased, and the increase appears to be in proportion to the number of methyl groups which are introduced into the compound. In the case of antiseptics, all that is required is to ensure a thorough destruction of the microbes, which give rise to putrefaction or disease; but when we come to deal with antipyretics, we have a more complicated problem, for we wish to reduce the temperature in man or the higher animals, while, at the same time, we have to avoid producing any marked action on the nervous system in the way either of spasms or paralysis, and to avoid also depressing the circulation and causing collapse. Several bodies nearly allied to carbolic acid, and differing from it only in the fact that the benzine nucleus in them has two hydroxyl groups attached to it instead of one, as in carbolic acid, have a strong antiseptic power. These bodies are hydroquinone, resorcin, and pyrocatechin. They all have an antiseptic action, but the strength of their action is very different; resorcin being only one-third of the strength, and pyrocatechin only one-fourth of that of hydroquinone. This difference in strength shows here, also, how important the position of the hydroxyl groups is; because in pyrocatechin they are close together, in hydroquinone they are as far apart as they can be, and in resorcin they keep an intermediate position. These bodies with their simple structure appear to be too well adapted to attack all parts of the animal organisation, and they are apt to affect the nervous system and circulation. In order to avoid these disadvantages, various attempts have been made to obtain bodies of a similar but more complicated structure, which should have a more specialised action, and would lower the temperature and leave the nervous system and circulation unaffected. These attempts have been more or less successful, and we owe to them the introduction of three new remedies—kairin, thallin, and antipyrin. The former two, after a brief period of trial, have been found more or less unsatisfactory, but the latter is perhaps, upon the whole, the best antipyretic that we possess, reducing the temperature, and, at the same time, having few disadvantages. Salicylate of soda is nearly allied in chemical constitution to resorcin, and as a general antipyretic it is almost equal to antipyrin, and superior to it in cases of rheumatic fever. It is possible that we may still obtain antipyretics more powerful than any we yet possess, and specially adapted to the febrile conditions arising from different causes, for these antipyretics do not appear to be equally successful in different kinds of fever. Antipyrin is best in hectic fever, salicylate of soda in rheumatic fever, but an antipyretic which will be thoroughly satisfactory in typhoid fever is still a desideratum. Antipyrin is generally free from any disagreeable action, but this is not always the case, for it sometimes produces collapse. This shows that in the action of all drugs there are two factors to be considered: the drug itself and the body into which it is introduced. The failure of our drugs to produce the effects we desire is one of the most trying occurrences in medical practice. Thus, in fever we some-

times find that drugs will not reduce the pulse as they do in non-febrile conditions, and digitalis in pneumonia sometimes appears to have lost its sedative action on the heart altogether. This failure of digitalis to slow the pulse in febrile conditions is due to paralysis of the regulating nerves of the heart, the part affected by the heat being that connected with the medulla. It was found that the muscle of a frog poisoned by barium could be restored to its normal condition by a high temperature, and also by the application of salts of potassium. If the body of an animal be saturated with potassium, it is rendered proof against the poisonous action of barium. Dr. Cash, following up this line of research, has recently demonstrated that an animal inoculated with the powerful antiseptic, corrosive sublimate, is capable of resisting the power of anthrax. These experiments derive additional interest from the fact that Pasteur is now inclined to think that his process of inoculation, which has produced such wonderful results in hydrophobia, is effected by means of an agent which is in reality a chemical substance, and not a microbe. The lecturer concluded with these words:—"When we look back for twenty years and see how far pharmacology has advanced since Crum-Brown and Fraser's experiments directed it into a new path, we may hope that twenty years more may not only have greatly added to our stock of new remedies, but will have enabled us so to ascertain the condition of our patients that we may ensure the action we desire either by the proper modification of a single remedy, by the proper admixture of remedies, or by proper changes in food or surroundings of each patient; that we shall not have to feel, as we painfully do at the present, that our patients often die for lack of knowledge, not on our part, but on that of our art. Nothing is more painful to a medical man than having to answer in the negative to an agonised appeal 'Oh, doctor, can you do nothing?' of those who see passing away those who are dearer to them than their own life. It is because we know the value of human life and the extent of human suffering, because we are called upon to prolong the lives of those not only their friends but their country and the world at large can ill spare, and to relieve pain sometimes amounting to extreme torture in the sufferers themselves, and felt hardly less keenly by their friends, that we consider it is not only permissible, but it is our imperative duty, to gain the knowledge we require to attain our object, even though we sacrifice the lives of animals, and inflict upon them small pain, never wantonly, never carelessly, and almost always slight in comparison with that we often see our patients feel. Moreover, the lower animals suffer from disease as well as men, and we may hope that the advance of pharmacology will give us the means of relieving pain and prolonging life in them as well as in man."

At the conclusion of Dr. Lauder Brunton's address, Professor LIEBREICH of Berlin read a paper on "Lanoline, a new Fatty Substance; its Physical Properties and Therapeutical Uses." After referring to the enormous progress which had been made in the study of pharmacology and therapeutics during the last few years, he pointed out that the importance of local treatment in many diseases had received little attention. Ordinary inunctions were of comparatively little value, but lanoline differed from common fat in that it contained cholesterine and not glycerine, and consequently assimilated more closely to the natural composition of the body. It was a very stable chemical compound, and was not decomposed by boiling with alkaline solutions. It was extracted from the fat contained in wool, and in a crude and imperfect form had long been employed in veterinary practice under the name of "wool oil." It absorbed water very readily, and could be rubbed into the skin without difficulty. It was very valuable indeed as an adjuvant in massage, and had this great advantage, that there was no necessity for washing the skin afterwards as when fatty substances were used. It was useful in all forms of skin diseases, whether local or constitutional. The great difficulty was to get it pure; chemists often supplied the wrong article or inferior kinds which gave rise to much irritation. He had frequently seen this, and in one case which had come under his notice in consultation a crop of acne spots had resulted from the use of an adulterated form. The pure lanoline had great powers of penetration, and might be used as a vehicle for the introduction of mercury and other drugs into the system. The great point to remember was that it was a neutral body freely miscible with water. Professor Liebreich concluded his paper, which was listened to with marked attention, by demonstrating the points of difference between good and bad lanoline.

Dr. JOHN V. SHOEMAKER (Philadelphia) said that his attention had been first directed to the subject in 1879, and had occupied him considerably since then. He had referred to it in the paper which he read before the British Medical Association at its meeting in Belfast in 1884. He had no doubt that animal fats were the best adapted for deep penetration. Lanoline was mild and soothing in action, and was reliable in a great number of obstinate skin diseases. He had used it personally with great success in alopecia, chronic eczema, boils, and carbuncles.

Dr. MACKEY (Brighton) said that lanoline in his hands had given the most marvellous results in the treatment of chronic joint affections, especially those of rheumatic origin. An ointment of iodide of potassium made with lanoline reduced swelling of the joints and gave prompt relief to pain. In psoriasis it was well-nigh a specific, whilst in chronic enlargement of the glands of the neck nothing could be better.

Dr. JOHN V. SHOEMAKER (Philadelphia) contributed an able paper on the Witch Hazel (*Hamamelis Virginica*) and its therapeutic uses. It had long been used, he said, as a domestic remedy, but was in reality a powerful therapeutic agent worthy of the attention both of physicians and surgeons. It was not only anodyne, but hæmostatic. It was employed in America in many forms—not only in the forms which were officinal, such as the liquid extract, but also as hazeline, which was an aqueous distillate. If it failed it was from being used in inappropriate cases. It was said by some that the good effects were due to the spirit contained in the preparations, but such was not the case, for he had tried weak alcoholic solutions against the hamamelis, and had no hesitation in saying that the latter was incomparably superior. The solutions of hamamelis contained a volatile oil, on the presence of which much of the activity depended. Perhaps some of the failures were attributable to the fact that insufficient quantities were given. It was not only an astringent, but an astringent tonic. It was not generally known that it was a cardiac sedative. He had found it act like magic in hæmorrhage after the failure of quinine, ergot, and a number of other drugs. It would check bleeding after parturition, especially when it assumed a chronic form. In chronic epistaxis it would often save life when other remedies were hopeless. He had used it in two cases of hæmophilia with absolute success. In hæmorrhage from the bowels, purpura, and many similar conditions it might be relied on absolutely. He had seen good results from its use in varicose veins, and had cured eleven out of seventeen cases of varicose ulcer by it alone. It was useful in chronic diarrhœa, leucorrhœa, and gonorrhœa; nothing was better in some forms of acne. In America it was largely used in the treatment of chronic naso-pharyngeal catarrh, and also as a mouth-wash.

Dr. POLLOK (Glasgow) fully corroborated Dr. Shoemaker's statements, and said that he had found hazeline useful in a great number of cases. Its good effects might to some extent be due to the terebene it contained.

OPHTHALMOLOGY.

Mr. CHARLES OLDHAM, President, after welcoming the Association to Brighton, and briefly reviewing the ophthalmological work of the past year, spoke as follows:—"The last time the Association met in Brighton was in the year 1851. There was then no Ophthalmic Section. Nearly thirty years were to elapse before the Association, which at that date numbered only about 1700 or 1800 members in all, could boast of a body of its associates who devoted their time and abilities to the sole study and practice of the surgery of the eye. But that year was destined to be a memorable one in ophthalmic annals; for it was in 1851 that the great Helmholtz brought out the instrument of which it may be said (and it is an excellent illustration of Schopenhauer's just remark, that all great thinkings are apparently obvious in proportion to their greatness) that its principle was apparently so obvious that we marvel it had never been thought of before. I need not point out to you the entire change that has been wrought in our art by this discovery. It will suffice to say that diseases which, before its advent, were so many additions to nomenclature, and to nomenclature only, have now become objective entities to the surgeon as well as to the patient.

It is as alien to what I conceive to be my province to make you any learned address on the more recondite and controversial points of our art—for we have before us for our consideration a series of papers and discussions which promise much in that direction—as to anticipate in any way the matter contained in these contributions. We shall undoubtedly listen to them with great interest, as they will give us the experience of others on questions which each one of us has frequently attempted to solve, and has also lamentably failed more than once at least in the enterprise. I note with some regret the absence in our list of any paper on the best mode of treatment of simple chronic glaucoma. Now that we have been enlightened by the labours of Priestly-Smith, Brailey, Landolt, and others, as to the etiology of this formidable affection, the advancement of our knowledge should bear fruit in the direction of some mode of dealing with the problem set before us, other than by iridectomy pure and simple, the results of which are very far indeed from satisfactory. Is there any hope that some other method of counterbalancing drainage, at once unirritating and effective, may be devised? At present, eyes so affected would seem to be best left alone. Have we learnt anything in the past year with regard to suppuration after operation? Would he not render a great service to mankind who should give us, by some process of generalisation, amongst other precepts, rules for the kind of incision to be made in various operations, but principally, of course, in that for cataract in different individuals—whether such incisions should be severely corneal, or in the sclero-corneal junction,—to give us, in short, some indications which should guide us as to the likelihood of consequent suppuration? It is certainly given to individuals, now and again, to possess what, for want of a better name, may be called an instinct in such matters. As a pointed example of this power of selection by instinct, I may cite the case of Antonius Stradivarius of Cremona. This great master, by the sense of touch alone, was able to divine the relative acoustic merits of the wood from which he made his hitherto unrivalled violins. The late Mr. Critchett possessed a rare instinct for the selection, not only of cases which were suitable for operation, but also of the particular mode of operating which should best favour success; but, like Antonius Stradivarius, he was apparently unable to convey the method of his secret to others. I cannot but think that this selective instinct, which has been given to few, may in course of time be formulated for general use. In this connexion it is pertinent to ask how far we are agreed upon the value of antiseptic measures in operations on the eye; and whether, conceding the value of these measures, out of many agents we possess for the purpose, there are any solutions of greater antiseptic virtues, and with fewer drawbacks, than those of the perchloride of mercury and boracic acid? One of the main objects of every Society of Oculists is the propagation of such knowledge of ophthalmic surgery, amongst those who do not enjoy their special advantages as will enable them to avoid being pointed at as the authors of cases of preventable blindness; and also by a routine acquaintance with the ophthalmoscope, to add a factor, or factors, to the items of evidence which they already possess towards forming a just estimate of many cases which must necessarily pass through their hands in the course of the working year. I venture to think that this has lately been, and is now being, very effectually done. Such cases as those I have referred to are becoming rarer every day, and I am frequently surprised at the amount and accuracy of ophthalmological knowledge to be met with at the present time amongst those who are not specialists, as compared with the acquirements in this direction of a very few years back. Ours is, indeed, one of the noblest of sciences. The blind have ever been considered amongst all nations and in all ages to be the class that most appeals to the commiseration and sympathy of mankind. It is, with us, not only a plain-sailing duty in the legitimate exercise of our profession, but also a pleasure of the acutest kind to relieve the necessities of those who call upon us in this respect for aid. The trustful confidence with which blind humanity invariably relies upon the everyday assistance of its brother man, even in the guise of a stranger, is a very marked feature of this particular affliction.

IT was resolved at a special meeting of subscribers, held on the 6th inst., to enlarge the premises at present occupied by the Bristol Eye Hospital.

Pharmacology and Therapeutics.

ANHYDROUS HYDROCHLORATE OF COCAINE.

WE have examined and used the sample of anhydrous crystals of hydrochlorate of cocaine which Messrs. M'Kesson and Robins, of 38, Mark-lane, have forwarded to us. The crystals were well formed, dissolved readily in distilled water, and proved to be free from impurity. The 20 per cent. solution which we prepared from it answered its purposes admirably. The crystals are sold in small phials containing one gramme each, and the cost of twelve grammes is one guinea.

COCAINE PELLETS.

Mr. W. E. Sacker, of Fenchurch-street, E.C., calls our attention to his compressed cocaine pellets for the treatment of bronchitis and laryngeal complaints. They contain in each four grains of chlorate of potassium, one grain of extract of liquorice, and one-sixtieth of a grain of cocaine. The compound cocaine pellets contain borax, chloride of ammonium, bicarbonate of sodium, and one-twentieth of a grain of cocaine. They are both somewhat roughly made, but the formulæ are good, and would undoubtedly prove applicable to many cases.

PURE TEREBENE.

We have received from Messrs. C. J. Hewlett and Son a specimen of their pure terebene. On examination it is found to be colourless, to have an agreeable odour, pleasant taste, and to be entirely volatile. It is well adapted for internal administration, and is an improvement on most of the so-called terebenes which were at first manufactured.

BUSH AND CO.'S SANDAL-WOOD OIL.

We have received from Messrs. W. J. Bush and Co. a sample of their pure drawn English oil of sandal-wood. It is undoubtedly a very pure specimen, and is admirably adapted for use as a medicinal agent.

ANTIPYRINE IN PEDIATRICS.

In the policlinique of Rio Janeiro, Professor Moncorvo has tested the value of antipyrine in infantile therapeutics by administering it to more than one hundred children of various ages, the youngest being only thirteen days old. The principal diseases treated were bronchitis, bronchopneumonia, tuberculosis, acute rheumatism, and some surgical affections associated with suppurative fever. As much as from two to three grammes of the agent were given every hour or two, and repetition regulated by half-hour thermometric observation. No toxic effect was observed, and defervescence was rapid and regular. Antipyrine may be employed hypodermically, and when administered by the mouth may be combined with quinine, the absorption of which it appears to facilitate.

BROMINE IN DIPHTHERIA.

Señor Lovat A. Mulcachy of Buenos Ayres finds great advantage in cases of diphtheria in giving a solution of bromine. The bromine is simply dissolved in water in the proportion of 1 to 2500. A teaspoonful of this is given every ten minutes. He says that children will swallow it automatically even when asleep. For infants under three years of age the strength may be diminished to half that mentioned above. He cites several cases showing the successful results obtained by this method, but he points out the importance of the administration being continued for some days, and of the medicine being given exactly every ten minutes. As to local caustic applications, he considers that they serve no purpose whatever, but only irritate and distress the patient.

TAR BANDAGES.

Dr. Prokhoroff, writing in the *Vrach*, speaks very highly of the advantages of tar bandages in compound fractures and suppurating wounds. The material used for the bandage is gauze, and, after this has been applied, it is well smeared over with the tar brush. The dressing is not changed but fresh tar is applied daily. The cases in which this method

has been employed are not as yet very numerous, but Dr. Prokhoroff hopes that other surgeons will give the plan a trial.

ACTIVE PRINCIPLE OF BONDUC SEEDS.

A bitter principle has been extracted from the bonduc seeds of the Indian Pharmacopœia in the form of a white bitter powder, soluble in alcohol and chloroform, and nearly soluble in water. It dissolves in fixed and volatile oils. In doses of from ten to twenty centigrammes it has proved of value equal to quinine in the treatment of intermittent fever.

CAMPHOR, CHLORAL, AND COCAINE IN TOOTHACHE.

Dr. K. Gsellfels recommends in toothache with hollow teeth a plug of cotton-wool saturated with a mixture made byheating five parts of camphor, five parts of chloral hydrate, and one part of hydrochlorate of cocaine to boiling for some minutes. An oily liquid is obtained.

REPORT
OF
The Lancet Sanitary Commission
ON
SMALL-POX AT WINDSOR.

THE Special Commission Report on the Housing of the Windsor Poor which we published on Aug. 15th, 1885, has, within less than a year, received disastrous confirmation. Some slight improvements have taken place in the interval. Prospect-place is condemned, a few new closets have been built, and there is a little more activity in respect to cleaning and whitewashing. Nevertheless the scandal of the exposure has not done much good. In the main, matters remain in the same state as at the time when we first described and denounced the insanitary condition of various slums, but especially South-place and its surroundings. Here, and in Bier-lane, small-pox and cholera had each in its turn wrought havoc; but it was stated, in reply, that during the last five years there had been no death from zymotic disease in the incriminated districts. These statistics related, however, to an average population of only 170 persons, and did not therefore include all the districts we condemned. Nevertheless, and whatever may have been the value of such an argument, it is now no longer available. During the last two or three months small-pox has prevailed in the very parts of Windsor to which we pointed as constituting a permanent public danger. At 4, Charles-place, which is but the continuation of South-place, described in our special report, a man died of small-pox during the hot weather of last July. The clergyman who visited this unfortunate man informed us that he found him lying on some wood shavings in a back room, where no ventilation existed. Instead of an immediate burial and a plentiful supply of disinfectants, the body was allowed to remain for some days in this awful rookery, so that the surrounding atmosphere was still further poisoned. When, at last, the body, without disinfectants, was brought for burial, even the undertaker refused to put a pall over so foul a coffin. Without this last sign of respect the poor man was buried, and the clergyman who performed the ceremony has suffered from sore-throat since. Charles-place consists of five houses, facing Charles-street. There is a small yard behind and three more houses. These eight houses have for the use of their occupants but three closets and no dustbin. The dust and refuse are thrown recklessly about. A mound, apparently of refuse well-trodden down, rises above the level of a little hutch used as a barber's shop. The rain must drain from this mound of dirt into the basement of the hairdresser's establishment. The barber pays £16 a year for this miserable shanty, and a so-called four-roomed house. But the ceilings of the rooms are so low that a tall man cannot stand up in them, and two of the four rooms measure about 9 ft. by 7 ft. Here people came to be shaved during the dog days, and enjoyed the refreshing operation within a few yards of the decaying corpse of a small-pox patient.

On visiting this mournful locality last week, we found that the house No. 4, Charles-place, was undergoing the process of fumigation. No. 17, Charles-street, almost opposite, was also abandoned, the people who had suffered from small-pox having left. No. 23, where there had been cases of small-pox, was also evacuated; but altogether, in this small clump of houses and within a radius of fifty yards, we found the record of eleven cases of small-pox. A few steps further, in Oxford-road on one side and in South-place on the other side, there were also cases, and we noted that a small shop in Oxford-road was shut up in consequence. We were further informed that there had been cases of small-pox in Victoria Cottages, in Bridgewater-terrace, in Arthur-road, in Church-street (close under the Castle walls), and in Love-lane (close to the barracks), but the Windsor authorities have, however, taken extraordinary measures to stamp the disease out, and it was resolved to isolate the cases in spite of all obstacles. Orders were given that not only should the sick remain in their miserable hovels, but that all the other tenants should be kept there close to the source of infection. Watchmen were posted outside the houses, and the inhabitants made prisoners, so that they should not carry the disease elsewhere, though such a measure rendered it likely that they would themselves contract the disorder. The value of this precaution, from a sanitary point of view, we do not at present propose to discuss. At No. 31, South-place, where seven persons lived in a very small house, we were informed that all the inmates, with the exception of a man who worked in the open fields, were confined on the premises. This caused a youth who had been employed as an errand boy in a shop for four years and a half to lose his place, and a young woman who had just secured an engagement as domestic servant had to give up her situation. We maintain that all those who have suffered through the epidemic, who have been confined to their houses so that the disease should not spread, have a right to compensation. But for the long delay in compelling the owners of property to do their duty towards their tenants, this epidemic would probably not have gained ground. It is stated that the first cases were imported by tramps; doubtless. We are not aware that small-pox is of spontaneous growth. But why was there no means of isolating these tramps—no fever hospital; and why are rookeries so long allowed to exist where zymotic germs find a fertile soil for their development?

In the month of March last a grand meeting was held. It was announced that a company would be formed under Royal patronage, and that the Bier-lane district would be pulled down and rebuilt. In a month's time another meeting would be convened and progress reported. Four months have now elapsed; there has been no other meeting, and no progress whatsoever is reported. We protest against this Bier-lane scheme as utterly inadequate to meet the exigencies of the situation. Bier-lane is certainly not the worst part of Windsor, and South-place should be first attacked. It is said that land owners and house owners claim too heavy compensation. Let the Sanitary Act be applied with the utmost and with constant rigour, the owners of this foul property will then be glad enough to get rid of it at any price. In one way or the other these Royal rookeries must be done away with, both those that are within fifty yards and those that are within five hundred yards of the castle. The danger of infection is almost equal in either case. During the last few weeks the small-pox has travelled from these slums to within a few yards of the castle walls, and close to the barrack gates. We have to consider the health not only of the Royal family, but of the *élite* of our troops quartered all the year round at Windsor. Reform in Bier-lane will not suffice to remove the dangers with which they and the ordinary inhabitants of the town, the innumerable visitors and tourists, are menaced; and, as the authorities at Windsor are so slow to move, we trust pressure, official pressure, will be brought to bear from without.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The fifty-sixth annual meeting of the members of this Association is to be held at Birmingham, from the 1st to the 8th prox. On the 2nd and 3rd ult., the Ingleby Lectures on "Recent Advances in Abdominal Surgery" will be delivered by Mr. Lawson Tait, admission to which may be obtained by medical members and associates of the Association. A lecture by Professor W. Rutherford, M.D., on "The Sense of Hearing" is also announced for the 3rd prox.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5397 births and 3472 deaths were registered during the week ending August 7th. The annual death-rate in these towns, which had slowly increased in the preceding seven weeks from 16·8 to 20·6, declined again last week to 19·9. During the first five weeks of the current quarter the death-rate in these towns averaged 19·8 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 10·0 in Halifax, 10·4 in Hull, 10·8 in Derby, and 15·0 in Plymouth. The rates in the other towns ranged upwards to 24·1 in Blackburn, 24·4 in Manchester, 28·9 in Norwich, and 31·4 in Leicester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding eight weeks (owing to the rising mortality from infantile summer diarrhœa) from 263 to 872, was last week 869; they included 657 from diarrhœa, 62 from measles, 55 from whooping-cough, 43 from scarlet fever, 38 from "fever" (principally enteric), 13 from diphtheria, and one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Hull and Derby, and the highest in Leeds, Norwich, and Leicester. The mortality from diarrhœa in the aggregate of the twenty-eight towns differed but slightly from that recorded in the previous week; the largest excess occurred in Birkenhead, Leeds, Norwich, and Leicester. Measles caused the highest death-rates in Preston, scarlet fever in Salford, whooping-cough in Manchester and Norwich, and "fever" in Cardiff and Portsmouth. Small-pox caused one death in Liverpool, but none in London and its outer ring or in any of the twenty-six other large provincial towns. The number of small-pox patients in the metropolitan hospitals situated in and around London, which had been 13, 11, and 10 on the preceding three Saturdays, had further declined to 8 at the end of last week; 2 cases were admitted to these hospitals during the week, against 2 and 1 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 163 and 172 in the preceding two weeks, declined last week to 148, and were 44 below the corrected average; this was a lower number of deaths from these diseases than have been returned in any week since the beginning of this year. The causes of 73, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Birmingham, Newcastle-on-Tyne, Sunderland, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Oldham, Salford, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·8 and 19·5 per 1000 in the preceding two weeks, declined to 18·8 in the week ending August 7th; this rate was 1·1 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·5 in Perth and 14·4 in Dundee, to 20·5 in Glasgow and 25·2 in Paisley. The 464 deaths in the eight towns showed a decline of 17 from the number in the previous week, and included 28 which were referred to diarrhœa, 23 to whooping-cough, 15 to scarlet fever, 8 to "fever" (typhus, enteric, or simple), 2 to diphtheria, 1 to measles, and not one to small-pox; in all, 77 deaths resulted from these principal zymotic diseases, against 65 and 67 in the preceding two weeks. These 77 deaths were equal to an annual rate of 3·1 per 1000, which was 1·9 below the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had increased in the preceding seven weeks from 8 to 34, declined again last week to 28, of which 10 occurred in Glasgow, 7 in Edinburgh, 5 in Dundee, and 3 in Paisley. The annual death-rate from diarrhœa in these eight Scotch towns last week did not average more than 1·1 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 3·7. The 23 fatal cases of whooping-cough showed an increase of 5 upon the number returned in each of the three preceding weeks, and included 18 in Glasgow and 2 in Aberdeen. The 15 deaths from scarlet fever showed a considerable increase upon the recent weekly numbers; 13 were returned in Glasgow, against but 5 and 3 in the previous two weeks. The deaths referred to "fever," which had been 4 and 1 in the previous two weeks also rose last week to 8, of which 4 occurred in Glasgow. The fatal cases of measles and diphtheria were below the average. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding seven weeks from 93 to 63, further fell last week to 58, and were 4 below the number returned in the corresponding week of last year. The causes of 58, or nearly 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 21·0 and 17·3 per 1000 in the preceding two weeks, was 17·6 in the week ending Aug. 7th. During the first five weeks of the current quarter the death-rate in the city averaged 19·7; the mean rate during the same period was 20·9 in London and 19·2 in Edinburgh. The 119 deaths in Dublin last week showed an increase of but 2 upon the low number in the previous week, and included 7 which were referred to scarlet fever, 3 to diphtheria, 2 to "fever," 2 to diarrhœa, 1 to whooping-cough, and not one either to small-pox or measles. Thus, the deaths from these principal zymotic diseases, which had been 12 and 5 in the preceding two weeks, rose last week to 15, and were equal to an annual rate of 2·2 per 1000, the rates from the same diseases being 5·9 in London and 2·0 in Edinburgh. The 7 deaths from scarlet fever showed a considerable increase upon recent weekly numbers, and exceeded the number in any previous week of this year. The fatal cases of diphtheria also showed an increase. The deaths attributed to diarrhœa were considerably below the average for the season. Two inquest cases and 2 deaths from violence were registered; and 41, or more than a third of the deaths, were recorded in public institutions. The deaths of infants and of elderly persons showed a considerable decline from recent weekly numbers. The causes of 10, or more than 8 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

NERVE-STRETCHING FOR LEPROSY.

To the Editor of THE LANCET.

SIR,—In your issue of June 5th is a brief report of a paper read before the Harveian Society by Dr. Downes. The question was asked how long the improvement continued after nerve-stretching. I still occasionally meet with cases operated on by Dr. Downes six or seven years ago. Many of these continue to have good sensation, others of them return for the purpose of having the operation repeated. Certainly in a large proportion of cases the benefit is permanent, and in very few indeed is the recurrence rapid or complete. In the *Edinburgh Medical Journal*, two years ago, I published an account of 170 nerve-stretchings which included Dr. Downes' cases. Any who are interested in the practice can refer to that paper; the theory has yet to be elucidated. I am, Sir, yours truly,

Kashmir Mission Hospital. A. NEVE, F.R.C.S. Ed., &c.

THE BEAUFORT LEG.

To the Editor of THE LANCET.

SIR,—Your issue of the 17th ult. contains a paragraph headed "A Modified Beaufort Leg," which ends by stating that Mr. Schramm sells the modified limbs at considerably less price than the original. Now, as one who has had above six years and a half practical and intimate experience of the "original" Beaufort leg, having ordered and paid for upwards of eighty specimens, perhaps you will do me the favour to allow me an equally prominent position with the original statement in your journal to deny the assertion so confidently made. The original leg, which has stood the test of some twenty years' experience, costs, when made by

Mr. E. Werber of Paris, the sole French manufacturer, from 32*s.* to 36*s.* Mr. Schramm's charges are 70*s.* to 90*s.*! One of the great merits of the Beaufort leg, indeed, *the* object of the invention, was cheapness, so that it might be given by the charitable to poor cripples. The modification of the Beaufort leg, however advantageous in use, is certainly not so in cheapness.—Yours faithfully,

HENRY H. MAXWELL,
London, Aug. 5th, 1886. General, Royal Artillery.

THE MEDICAL ACT OF 1886.

To the Editor of THE LANCET.

SIR,—Since a copy of this Act appeared in your issue of 3rd July I have anxiously looked for an expression of opinion from some member of the profession, but so far as I am aware *no one has as yet written either favourably or otherwise of this piece of legislation.* If I interpret the Act correctly, it signifies that we may at any time expect men who possess an M.D. from some *American degree-granting University* to settle in our midst. As these *gentlemen* have neither expended the time nor money necessary to acquire any medical qualification obtainable in Britain, they will be able and willing to give their services at a low rate; they will, moreover, have the advantage of being thought by people generally to be better qualified to treat sickness than, for example, an M.B. or an M.R.C.S., owing to their being "Doctors of Medicine." It surely cannot be too late to prevent such an injustice being thrust upon us. If some eminent member of the profession will raise his voice against this iniquitous Act, he will, I feel certain, be supported by every legally-qualified practitioner in Britain, and will, moreover, earn our lasting gratitude and, I hope, something more substantial.

I am, Sir, yours faithfully,
Aug. 4, 1886. NEMO.

*** The recognition of foreign degrees will be one of the most serious duties of the Council under the new Act.—ED. L.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NOTIFICATION OF INFECTIOUS DISEASES.

MR. A. E. HARRIS, the medical officer of health for Sunderland, said in a paper read last week at Gilsland that "he considered it strange the people of this country had not yet generally adopted laws for their protection from diseases which were spread by infection. He knew well that Parliament was very jealous of enacting laws which interfered in any way with the liberty of the subject; but he was also aware that when persons suffering from infectious diseases unnecessarily exposed themselves, they were degenerating their liberty into licence, and he thought it strange that while a paternal Government insisted that if an unfortunate pig should unhappily contract swine fever the animal was fenced round with all kinds of restrictions to prevent the disease spreading to any of its kind, yet that it did nothing, and had done nothing, to insist on the greatest care being taken that infectious diseases should be carefully separated from the public." Mr. Harris, in the course of his paper, went on to show that the Medical Department of the Local Government Board was entirely in favour of the principle of notification. He stated that the compulsory notification took effect on the 1st of September last, and mentioned sixty-two cases which had come under his notice where disease occurred in places of business at Sunderland, which might very easily consequently have become centres for the spread of disease. Mr. Harris further said that since the notification of infectious diseases had been introduced in Sunderland infectious diseases had been less than at any period during the last twenty years.

MEASLES AND GOSSIPING.

At the late meeting of the Hebburn Local Board the subject of the present epidemic of measles came under consideration. The medical officer stated that the outbreak of measles at the Hebburn Colliery was very serious. Nine deaths had taken place, but the disease gave signs of abatement. At the same time, it was very difficult to prevent the spread of the disease, owing to the gossiping nature of the inhabitants. The houses were invariably to be found with open doors, and the neighbours entered the first one they came to, and sat down.

THE FLEMING MEMORIAL HOSPITAL.

A further step in progress has been made towards the erection of the hospital proposed to be built in Newcastle by Mr. Fleming, a munificent citizen, for sick children. Mr. Currey, architect of St. Thomas's Hospital, London, having been appointed to advise Mr. Fleming in the matter of the competition of designs for the hospital, the former gentleman has given the first place to the design of Messrs. Quilter and Wheelhouse of London, so that we hope very soon to see the foundation-stone laid.

At a meeting of the Jarrow Town Council last week it was finally decided to accept tenders for the erection of a hospital for infectious diseases in the borough. The question, it was stated, had been under discussion for nearly twenty years.

Newcastle-on-Tyne, Aug. 2nd.

EDINBURGH.

(*From our own Correspondent.*)

POST-GRADUATE COURSE IN EDINBURGH.

THE programme for this course of Clinical Instruction, which is arranged to extend from September 27th to October 16th, is now completed. Thirteen separate subjects are to be taken up and illustrated clinically or experimentally; in some of them there will be the option of attending one or other of a series of cliniques in different departments—this, however, only where the amount of material at command is so great that subdivision of labour will be advantageous, as in general medical and surgical diseases; in other subjects, where this is not the case, arrangements for amalgamation and concentration of material have been made. Special courses will be given on dental diseases, the diseases of children, gynæcology, diseases of the ear and throat, of the eye, and of the skin, syphilis, mental diseases, general medical and surgical diseases, and upon pathology. Six demonstrations on the regional anatomy of the viscera and organs are also arranged for. The hours for the various demonstrations have been arranged, so far as may be so as not to clash with one another; and a chart has been prepared giving ready information as to the time, day, and place of meeting of each of the classes in the course. The charts and further particulars are obtainable upon application to either of the secretaries, Prof. Chiene and Dr. Claud Muirhead, of Charlotte-square, Edinburgh. A large number of old Edinburgh students have already announced their intention of attending the course, and there is every prospect of its being in all respects a great success.

GRADUATION THESES.

At the annual Graduation in Medicine which took place last week, forty-nine Bachelors of Medicine of the University of Edinburgh were promoted to the degree of M.D., upon their presentation of theses dealing with medical or scientific subjects. Five of these dissertations were of such merit as to earn for their authors University Gold Medals, the highest distinction in medicine conferred by the University upon its alumni. Two of these theses, those of Dr. William Hunter and Dr. Edward Carmichael, were upon the subject of the transfusion of blood, both containing original and valuable results derived from experimental research. Dr. MacFadyean presented a thesis upon the behaviour of bacteria in the digestive tract, the outcome of investigations carried on in the laboratory of Professor Fluegge, and of special interest at present from the relation it bears to the discussions which are now taking place upon the etiology of cholera. Dr. A. M. Paterson's thesis is upon the spinal nervous system of the mammalia, and is a contribution to anatomical science from the Manchester Medical School, in which he is senior demonstrator of anatomy. Dr. Stockman in his thesis considers the action and therapeutic value of vegetable astringents, giving the results of investigations carried on in the Materia Medical laboratories in the University of

Edinburgh. In addition to these five thesis, which were deemed worthy of gold medals, were a number specially commended for the excellence of the work contained in them, amongst which are Dr. Lang's upon the knee-joint, and Dr. Clemow's upon the infective granulomata. The whole of these theses find their way into the University archives, where in general they pass through an undisturbed existence, for as theses they are never published. Fortunately, however, they are not altogether committed to oblivion, for in the form of summaries, extracts, or at times in lengthy papers, the pith of their contents finds its way into current numbers of one or other, occasionally even several, of the leading medical journals, and data often of considerable importance are thus added to various branches of medical science.

Edinburgh, August 10th.

IRELAND.

(From our own Correspondent.)

VICERREGAL APPOINTMENTS.

THE following appointments have been made by his Excellency the Marquis of Londonderry:—Physician in Ordinary: Dr. Hatchell. Surgeons in Ordinary: Philip Crampton Smyly and Edward Hamilton. Surgeon to the Household: Thomas Nedley. Surgeon Dentist in Ordinary: Robert H. Moore. Surgeon Dentist: A. H. Jacob.

ROYAL UNIVERSITY OF IRELAND.

At a meeting of the Senate last week the death of Dr. Curtis, who had been re-elected as senator as late as July 27th, having been reported, a resolution was unanimously adopted, expressing the regret of the Senate for the loss of so valuable a member, and their sympathy with his family in their bereavement. The Senate have appointed October 27th next for the annual meeting of Convocation, when the vacancy in the Senate will be filled up. Dr. William Thomson has been elected a member of the Standing Committee.

SOUTH DUBLIN UNION.

At a meeting of the guardians last week a communication was received from Dr. H. Stevens, Inspector to the Local Government Board, England, to the effect that he had been instructed to visit Dublin, in order to inquire into the arrangements for public vaccination, and to report to his board with the view to the recognition by the board of the certificates of proficiency in vaccination that may be given by a public vaccinator to be selected by the board. Dr. Stevens will be in Dublin on an early day, and the clerk of the union has, at his request, furnished him with particulars of the vaccination arrangements in the union.

THE BELFAST RIOTS.

There were, on Monday last, thirty-seven persons injured by gunshot wounds remaining under treatment in the Belfast Royal Hospital. About twenty-seven of these cases were admitted on Saturday, and ten on Sunday. In addition, fifty persons were treated for gunshot wounds in the extern department of the hospital.

SEVERE BULLET WOUND; RECOVERY.

The case of Head Constable M'Coldrick, of Dundrum, county Tipperary, is worth noting. On July 12th the constable shot himself with a revolver; the bullet entering half an inch under the heart, passed entirely through the body, and emerged at the back, close to the spinal column, being found immediately after the occurrence in the man's clothes. The patient has now quite recovered, and has resumed duty.

RATHDOWN UNION.

Mr. Robinson, Local Government Board Inspector, in his recent report on the condition of this workhouse, states that with regard to the lunatics located in the institution he has carefully considered the recommendations of the committee of the guardians dealing with this matter. He is convinced that unless a paid attendant is appointed and placed in charge of this department, there is no security that the directions of the committee will be properly and stringently carried out. Our readers will bear in mind the recent case of manslaughter by a lunatic inmate of the workhouse, which in the opinion of the coroner's jury was attributable to the want of efficient supervision in this department. The Local Government Board have written to the guardians suggesting that the recommendation of their inspector should be carried out, but the guardians appear to consider that their present arrangements are ample to meet all necessary requirements.

THE HARE ISLAND EPIDEMIC.

The epidemic of typhus fever which was reported to prevail to an alarming extent has, on investigation, proved to be less extensive than was at first supposed. There are twenty-four cases of typhus fever and one doubtful case on the island, which lies about half a mile off the mainland, and is of small size. Only one death has occurred since the outbreak of fever, or a mortality of about 4 per cent., showing that the disease must be of a mild character. The habitations of the islanders are in a most insanitary condition, and of the forty-one houses all are unfit for human habitation. There is also a considerable amount of overcrowding. The water is obtained from wells, to the majority of which the cattle have access. A guardian of the Skibbereen Union has given notice that a medical officer should be required to reside in the district; the difficulty, however, will be to find any medical practitioner who will consent to accept the appointment.

At the recent examinations for the First Professional of the Royal College of Surgeons, exactly 50 per cent. of the candidates who entered were rejected

A sum of nearly £300 has already been subscribed for the testimonial in memory of the late Dr. Eames of Cork.

Dublin, August 10th.

Obituary.

THOMAS H. PURDON, M.B. DUB., F.R.C.S.I.

IT is with sincere regret that we have to announce the death of another of the older medical practitioners of Belfast, Mr. Thomas H. Purdon, which took place at his residence in Wellington-place on Friday, the 6th instant, at the advanced age of eighty-one. The deceased gentleman, who was the principal representative of an old Huguenot family which settled in Ireland in the reign of Queen Elizabeth, was born in Belfast in 1805, his father being a medical man, Dr. Henry Purdon, Staff Surgeon. After spending some time at the Armagh Royal School, Mr. Purdon entered Trinity College at the early age of thirteen, a sufficient evidence of his precocity, and after a distinguished College course he took the degrees of M.B. and M.A. in 1828; but previous to this, in 1821, he was elected a Fellow of the Irish College of Surgeons. He also studied for a time at Edinburgh. While he was attending in Dublin at the University he was prosector and demonstrator for a well-known man, Dr. Harrison.

Mr. Purdon commenced practice in Belfast in 1828, although from the age of sixteen he had been engaged as assistant in some of the local dispensaries. He soon obtained a large and high-class practice, and enjoyed the complete confidence of the aristocracy of the neighbourhood — a confidence which he retained for upwards of half a century. During the long period in which he was engaged in active practice (sixty years) Mr. Purdon held numerous medical appointments. He was formerly senior surgeon to the Royal Hospital, and latterly consulting surgeon. He was consulting physician to the Belfast Hospital for Consumption, and consulting surgeon to the Ophthalmic Hospital. He was for a time medical officer to the County Antrim Prison, to the Deaf and Dumb Institution, and to the Infirmary and Poorhouse. He was permanent President of the Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland. He was a prominent and highly respected member of the Church of Ireland, and, in recognition of his eminence as a Churchman, and his spotless life, he was ordained as a lay reader by the present Lord Primate of Ireland. Mr. Purdon took great interest in everything pertaining to his native town, and about twenty-six years ago he was a member of the Town Council. He belonged to a medical family *par excellence*.

His grandfather, father, and two brothers were doctors, he had one son in the profession, and at present three of his nephews are in practice. The deceased was an able surgeon, and a skilful and much-trusted physician. It is said he performed the first case of tracheotomy in Ireland, the subject of which lived for thirty-six years afterwards. He was a great reader, and amassed a fine collection of medical books. He was also at times a contributor to the *Dublin Medical Journal* and to the *Medical Press*, but it is probable that had his practice not been so large he would have written more. Few medical men have occupied a more respected and honourable position than the late Thomas Henry Purdon. By his numerous patients he was beloved as much for his extreme kindness as for his skilful treatment of their maladies, while by his professional brethren he was respected on account of his abilities, his ripe experience, and especially on account of his thoroughly honourable and upright professional conduct. He was by birth, education, ability, and high personal character an honour to the medical profession.

THE SERVICES.

SURGEON H. S. PARKER, Medical Staff, having rejoined from the three months' privilege leave of absence granted to him to visit Rachenir, has returned to the duties of Staff Surgeon, Medical charge of the Ordnance Department, and of the Lock Hospital at Ferozepore.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon Alexander Frederick Bradshaw to be Deputy Surgeon-General, vice J. J. Thompson, retired.

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon Godfrey, to the *Rupert;* Fleet Surgeon W. B. Fletcher, to Sheerness Yard; Fleet Surgeon J. S. Dolby, to the *Crocodile;* Surgeon J. Porter, to the Bermuda Hospital; Surgeon W. R. Young to the *Impregnable;* and Staff Surgeon W. E. Bennett, to the *Pylades.*

YEOMANRY CAVALRY.—Westmoreland and Cumberland: Surgeon and Honorary Surgeon-Major Joseph Wickham, M.D., resigns his commission.

ARTILLERY VOLUNTEERS.—1st Orkney: Acting Surgeon John Gibson resigns his appointment.

RIFLE VOLUNTEERS.—6th Lancashire (1st Manchester): Leslie Hudson Jones, Gent., M.D., to be Surgeon.

Medical News.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The following candidates at the July sittings of the Examiners, held in Glasgow, passed the examinations for the triple qualification conferred by the three Scottish medical corporations, and were admitted Licentiates:—

J. M'Clymont, Edward Ball, Ewen Whitwell, Henry Johnson, Archibald M'Arthur, John C. Davidson, John K. Jones, Alfred J. Harwood, and A. C. Milne, of the Glasgow Medical School; Alice Jane S. Ker, of the Edinburgh School and the London Medical College for Women; H. W. Cross, of the Newcastle-on-Tyne School; A. H. Hoffman, of the Birmingham School; F. H. Gaunson, of Melbourne University and the Edinburgh School; J. F. Chapman and Alfred W. Rinder, of Melbourne University; W. C. Halpin, of the Dublin School; Joseph de Souza and F. V. A. de Souza, of the Grant Medical College, Bombay; Francis D. Robertson, M.D., M'Gill College, Montreal.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 5th inst.:—

Dutt, Aaron Chaunder, 200, St. Paul's-road, Highbury, N.
Tomlinson, William Henry, 13, Craig-street, Devonshire-street, Manchester.

At the recent examination for the Prizes in Botany given annually by the Society of Apothecaries, the successful candidates were:—

Boyce, Robert W., of University College, the Gold Medal.
Hall, Frederick William, of Guy's Hospital, the Silver Medal and Books.

VACCINATION GRANT.—Dr. Dearden, Church, has received the grant for efficient vaccination in his district sixth time).

ON the 4th inst. a bazaar in aid of the funds of the Royal Surrey County Hospital was opened at Guildford by Prince Albert Victor.

AN open-air concert of sacred music was given at Rochdale on the 8th inst., in aid of the funds of the local infirmary, the proceeds amounting to £124.

PRESENTATION.—On the fifth inst. the members of the Redcliffe and Totterdown Dispensary presented Mr. H. Mc Quade, B.A., M.B., B. Ch. Dub., with a dining-room clock as a token of their esteem and as a recognition of his recent marriage.

THE VATICAN AND CREMATION.—The Roman Holy Office has issued a decree forbidding Roman Catholics to belong to cremation societies, and the practice of cremation is stigmatised as *detestobilem abusum corpora humana cremandi.*

WATFORD DISTRICT COTTAGE HOSPITAL.—The ceremony of opening this hospital, recently erected in the Vicarage-road, was performed on the fifth inst. by the Countess of Clarendon. It affords accommodation for nine patients. The cost of the building and site is about £2200.

INTERNATIONAL ASSOCIATION OF SURGICAL AND ORTHOPÆDIC INSTRUMENT MAKERS.—The fourth meeting of this association will be held at 12, Dorotheenstrasse, Berlin, on Tuesday, September 14th, at 6 P.M. Intending members of any nationality are invited to attend. Mr. Krohne, of 8, Duke-street, Manchester-square, London, W., is the secretary.

ROYAL UNIVERSITY OF IRELAND.—The following exhibitions and honours have been awarded:—First Examination in Medicine:—Exhibitions: First Class (£30), John McNamara; Second Class (£15), Jeremiah Ambrose. Honours: First Class, John McNamara; Second Class, Jeremiah Ambrose, John E. W. Cruise James R. Steen, Walter V. A. Raleigh.

MUNICIPAL LIBERALITY.—At its sitting of July 31st, the Municipal Council of Paris voted a credit of 289,765 francs (£11,590) for the construction of a new surgical department at the Hôpital Cochin, to replace the wooden huts erected during the siege. It is intended to provide for all the requirements of modern surgery, with laboratory, means of isolation, &c.

THE Council of the Medical Defence Union has determined to memorialise the Local Government Board on behalf of Mr. Simpson, who it will be remembered was requested by the Local Government Board to resign his post as medical officer to the Birmingham Workhouse on account of an outbreak of puerperal fever in that institution, which it was alleged that Mr. Simpson by his recklessness had caused.

HOSPITAL SATURDAY FUND.—At a meeting of the board of delegates of this fund held on the 7th inst., it was reported that, notwithstanding the very inclement weather on the occasion of last Hospital Saturday, the 17th ult., the falling-off in the collection had not proved as large as had been anticipated. The diminution amounted to nearly £500. The total of the collection, so far as it was yet ascertainable, was £4039.

APOTHECARIES' HALL OF IRELAND.—The following have been elected office-bearers for the ensuing year:—Governor: Edward J. O'Neill. Deputy-Governor: George Wyse. Court of Directors and Examiners: Edward H. Bolland, Thomas Collins, John Evans, Arthur Harvey, Charles Holmes, Charles H. Leet, Robert Montgomery, Charles F. Moore, Henry P. Nolan, Richard O'Flaherty, Sir George B. Owens, J.P., John Ryan, and James Shaw. Representative on the General Medical Council: Thomas Collins. Secretary: Robert Montgomery.

THE UNIVERSITY OF LONDON.—At the recent preliminary Scientific (M.B.) Examination, 58 candidates passed the entire examination—viz., 25 in the first division and 33 in the second. Thirty-four candidates satisfied the examiners in two subjects of the examination, and 31 in one subject. At the Intermediate Examination in Medicine, 82 passed the entire examination—52 in the first and 30 in the second division. In all subjects, excluding Physiology, 12 passed—10 in the first and 2 in the second division. In Physiology only, 15 passed, the names of 8 appearing in the first division. In the Examination for

Honours at the Intermediate Science and Preliminary Scientific (M.B.) conjointly, the following are the numbers of successful candidates:—Inorganic Chemistry, first class 5, second class 5, and third class 6; Experimental Physics, 2, 3, 3, respectively. In Botany, one candidate obtained a first and 2 candidates a third class. In Zoology, the names of three candidates appear in the first class, 4 in the second, and 3 in the third.

AN epidemic of measles amongst the children in the Driffield Workhouse was reported to the Local Board of Guardians on the 5th inst. The disease is also prevalent in the town.

AT a recent meeting of the Paris Municipal Council the concession of land for the erection of a Pasteur Institute was extended from thirty to ninety-nine years. A vote, expressing unqualified admiration of M. Pasteur, was also carried.

MEDICO-LEGAL LABORATORIES IN SPAIN. — The Spanish Ministry of Justice has arranged for the establishment in Madrid, Barcelona, and Seville, of laboratories of forensic medicine. After the middle of September, analyses which may be ordered by magistrates will be conducted in the new institutions—a provision enabling experts nominated in the interests of accused persons to be present during the performance of such analyses.

DEATH FROM ETHER.—An inquest was held on the 6th inst., by Dr. Diplock, on the body of Mrs. Wesselhoeft, the wife of an American physician. From the evidence it appeared that the deceased had suffered from asthma, for the relief of which she was supplied with ether. A pint bottle two-thirds full of the drug was found by the bedside, and the atmosphere of the room was charged with the vapour of ether. The jury returned a verdict in accordance with the medical evidence, and expressed the opinion that it was unwise to have allowed the deceased to have so much ether at her command.

PARKES' MEMORIAL PRIZE ESSAY.—Six essays were sent in on Dec. 31st, 1885, on the following subject:—"The Prevention of Disease among Troops during Military Operations in Tropical and Subtropical Climates." The following gentlemen consented to act as Assessors at the request of the Committee:—Surgeon-General W. C. Maclean, C.B.; Deputy Surgeon-General J. A. Marston, M.D.; Hon. Deputy Surgeon-General H. L. Veale, M.D. After careful consideration of the essays, the Assessors unanimously adjudged the prize to Dr. Andrew Duncan, F.R.C.S., Indian Medical Service, who entered the Medical Service on Sept. 30th, 1878. The prize consists of a gold medal of the value of 15 guineas, and £100 in money—it is awarded triennially; the subject for the next essay being "The Etiology and Prevention of Yellow Fever, to be illustrated so far as possible from the personal experience of the author." Essays to be sent in to the Director-General, Medical Staff, War Office, London, S.W., on or before the 31st Dec., 1888. The competition is open to all executive medical officers on full pay of the Royal Navy, Army, and Indian Medical Departments.

ARSON BY MEANS OF PHOSPHORUS.—At the last Manchester Assizes in July, a solicitor and a builder were sentenced, the former to ten and the latter to seven years' imprisonment, for arson. In December last, they took a shop in Hulme, fitting it up as a cigar shop, but not living upon the premises. The stock was valued at about £2 10s. and the fixtures were of the thinnest wood, and under the counters were large quantities of shavings. They ensured the stock and fixtures for £950 in April last, and in the night of the 19th of June a fire broke out, and on the arrival of the fire-brigade there were found to be three distinct fires in different parts of the shop and house. The two firemen who first entered were nearly suffocated by a dense white smoke, and applied to Mr. Heslop, Divisional Surgeon, Manchester police force, a day or two after, complaining of a rawness of the throat and chest, very different from anything they had experienced before. On account of what they told, Mr. Heslop burned some phosphorus in their presence, and they at once recognised the smell. Some phosphorus was then placed in some shavings, and it ignited spontaneously in about eight or ten minutes, and in sawdust in about twenty minutes. The gas-pipes had been cut, and the ends joined with indiarubber tubing. The defence was that there was no evidence that the prisoners were the men who set fire to the place.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

JACK, JOHN S., M.B., C.M.Glas., has been appointed Medical Officer for the Rothbury East District of the Rothbury Union.

OLDMAN, CHARLES E., M.D.Cantab., M.R.C.S., has been appointed Medical Officer for the Workhouse and the Western District of the Godstone Union.

PEARCE, FRANCIS D., M.R.C.S., L.S.A., has been appointed Medical Officer for the South District of the Kingsbridge Union.

PROWSE, W., M.R.C.S., L.S.A., has been appointed Medical Officer for the Hutton District of the Axbridge Union.

WHITTINGTON, T., L.F.P.S.Glas., L.R.C.P.Ed., has been appointed Medical Officer for the Prestwich District of the Prestwich Union.

Births, Marriages, and Deaths.

BIRTHS.

DRURY.—On the 6th inst., at Lingmoor, Dean-park, Bournemouth, the wife of W. V. Drury, M.D., of a daughter.

GRAMSHAW.—On the 3rd inst., at Walton-on-Naze, the wife of Henry Gramshaw, M.D., of a daughter.

LLOYD.—On the 6th inst., at Ty'nycoed, Barmouth, the wife of H. J. Lloyd, L.R.C.P., &c., of a son.

WILLIAMS.—On the 6th inst., at The Grange, Grinshill, near Shrewsbury, the wife of Clarence Williams, M.R.C.P., of a daughter.

MARRIAGES.

DAVIS—MALTBY.—On the 4th inst., at Old Basford Parish Church, Frederick Howard Davis, L.F.P.S., L.S.A., of The Grove, Dawley, Salop, to Maud Mary Maltby, daughter of Dr. Maltby, of Old Basford, Notts.

DE'ATH—ZIMMERMANN.—On the 5th inst., at St. Stephen's Church, Castle-hill, Ealing, by the Rev. B. Seymour Tupholme, Vicar, assisted by the Rev. John Chubb Ford, George Hanby De'Ath, L.R.C.P. Lond., M.R.C.S. Eng., youngest son of the late Robert De'Ath, of Buckingham, to Margaret Fair, youngest daughter of Edward Zimmermann, of 5, Cleveland-gardens, Castle-hill, Ealing, formerly of Buenos Ayres.

GORDON—GARLAND.—On the 4th inst., at St. Michael's, Croydon, George A. S. Gordon, M.A., L.R.C.P.Ed., L.R.C.S.Ed., to Emily, third daughter of Captain Augustus Henry Garland, of Sydney Lodge, Croydon.

GREENWOOD—JENKINSON.—On the 5th inst., at St. Paul's, Clapham, Cecil Danforth Greenwood, M.R.C.S., to Annie Beatrice, daughter of Alfred Jenkinson, of Clapham.

HALL—MORGAN.—On the 4th inst., at St. Mary's Church, Dilwyn, T. Lambert Hall, M.R.C.S., of Great House, Dilwyn, to Edith Mabel, third daughter of the Rev. T. Morgan, M.A., Vicar of Dilwyn, Herefordshire.

HANLY—MATTS.—On the 5th inst., at the Church of the Holy Cross, Leicester, by the Rev. F. Procter Prior, assisted by the Rev. F. Gabriel Whitacre, Dr. T. F. Hanly, of Newtown Desford, second son of R. Hanly, Esq., of Brighton, to Hannah Elizabeth Hooley, only daughter of the late Joseph Healey Matts, Esq., of Cropstone, Leicestershire.

KEETLEY—LONG.—On the 5th inst., at St. Mary's, Clapham-park-road, by the Rev. Richards Crofts, Charles B. Keetley, F.R.C.S., of 10, George-street, Hanover-square, W., to Anna M., daughter of the late Henry Holmes Long, Esq., H.E.I.C.S.

MACDONOGH—HANCOCK.—On the 10th inst., at All Saints', Isleworth, William Frederic MacDonogh, L.R.C.P., M.R.C.S., to Thérèse Uzielli, eldest daughter of Thomas Webster Hancock, Esq., of Treskelly, St. Margaret's, S.W.

MACKINNON—MACPHAIL.—On the 5th inst., at the Free Church, Manse Kilmuir, Isle of Skye, by the Rev. J. Calder Macphail, uncle of the bride, Francis Irvine MacKinnon, M.B.Edin., M.R.C.S., Medical Missionary, Damascus, to Lydia Jessie, second daughter of the Rev. John S. Macphail.

PENNY—PINDER.—On the 5th inst., at St. Matthew's, Denmark-hill, by the Rev. Stephen Penny, M.A., brother of the bridegroom, assisted by the Rev. H. Weston Wright, Edmund J. Penny, Esq., M.R.C.S., of Berkhampsted, Herts, to Annie Sophia Devall, daughter of Dr. and Mrs. Pinder, of Camberwell-green.

ROBSON—BALLARD.—On the 4th inst., at the Parish Church of Preston, Sussex, W. W. Constable Robson, M.R.C.S., of Walkeringham, Notts, to Rebecca, third daughter of Richard Ballard, of Patcham, Sussex.

DEATHS.

ARMSTRONG.—On the 5th inst., at Brampton (suddenly), William Armstrong, Surgeon, J.P. for the County of Cumberland, aged 74.

COVENEY.—On June 25th, John Coveney, M.R.C.S. (of phthisis), aged 25.

FOWLER.—On the 7th inst., at Hampstead, Robert Fowler, M.D., of Old Burlington-street, and Bishopsgate-street Without, aged 58.

MADDEN.—On the 8th inst., at Northwich-terrace, Maida-hill, Christopher J. Madden, M.D., aged 81.

MANN.—On the 4th inst., at Kingsdown Villas, Wandsworth-common, Robert James Mann, M.D., F.R.C.S., aged 69.

PLAYFAIR.—On the 6th inst., at Fishery House, Boxmoor (suddenly), Charles Edward Playfair, Staff-Surgeon, R.N., retired.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, August 12th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 6	29·94	W.	66	62	107	80	60	...	Cloudy
,, 7	29·97	W.	66	64	115	78	62	...	Overcast
,, 8	30·03	W.	72	68	119	76	64	·02	Cloudy
,, 9	30·08	W.	65	62	107	72	62	·06	Overcast
,, 10	29·71	W.	62	62	82	65	61	·15	Raining
,, 11	29·91	N.W.	59	54	106	71	53	·02	Fine
,, 12	30·01	W.	60	55	110	70	50	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

"A HOSPITAL ROMANCE."

THE *Leisure Hour* for the present month contains an affecting account of an incident in London hospital life, which, while evidently not overdrawn, is strikingly descriptive of the interest taken by the officials of medical charities in the well-being of patients placed under their charge. The "romance" should serve to enhance the interest of the public, which will bear a little quickening, in the beneficent institutions whose "praise" recently was "in all the churches."

Thirty.—The question is a legal one, the answer to which depends on the agreement as to costs beforehand.

Dr. Julius Rüdinger.—We will consider the suggestion.

THE "PENDJEH SORE."

To the Editor of THE LANCET.

SIR,—In your issue of April 10th, p. 703, an account of the "Pendjeh Sore" is given, from the *Vrach*, by Dr. Suski, and in your issue of June 12th, p. 1148, Surgeon Pierson points out the identity of this disease with Oriental sore known under many names, as "Delhi boil," "Scinde boil," "frontier sore," &c. A full account of the distribution will be found in Hirsch's Geographical Pathology, vol. ii. (New Sydenham Society). I pointed out this identity in an Indian journal early in May, where I also added that the account of the bacillus and *every* statement given in your abstract, and supposed to be original, will be found in my article on this subject in the *Practitioner* of last January.

I am, Sir, yours obediently,

Burmah Field Force, July 11th, 1886. J. HICKMAN, Med. Staff.

B.—The Royal Benevolent College answers to our correspondent's first question. There is a Branch Medical Council for Scotland; address—4, Lindsay-place, George IV. Bridge, Edinburgh.

A MONSTER CHILD.

To the Editor of THE LANCET.

SIR,—Here is a nut for physiologists to crack. A thin little woman gave birth to a male child sixteen months ago, at the village of West Camel, Somerset. When born the infant was of ordinary size in every way; it now weighs and measures as follows: Length, 36 in.; circumference round abdomen 33 in., chest 30 in., thigh 17 in., calf 11½ in., neck 15½ in., arm 10 in., and face 17 in. It is perfectly impossible for anyone to conceive its extraordinary appearance without seeing it. Its weight is 4 st. 8 lb. I may further add that the father is a man of ordinary size. The infant seems very intelligent and happy, but on account of its enormous weight it cannot be lifted without expressing pain.

I am, Sir, yours faithfully,

Sherborne, July, 1886. NATHL. EDWARD DAVIES.

THE NEW SOLICITOR-GENERAL ON THE BARTLETT CASE.

MR. EDWARD CLARKE, Q.C., contributes the following preface to a complete and revised report of the Bartlett poisoning case which has lately been issued by Messrs. Stevens and Haynes. The preface is dated, "5, Essex-court, Temple, July, 1886":—

"The case of which a complete and corrected report will be found in this volume attracted so much public attention, and had in it so many elements of enduring interest, that I think it desirable that it should be recorded in a permanent and convenient form. The very large correspondence which came to me during the progress of the case from members of the medical profession showed that the questions which had to be discussed were felt to be of great importance in the study of medical jurisprudence; and I have never known a case, or at all events not more than one, which had in itself so strong a dramatic interest. The strange relations between the prisoner and the husband, with whose murder she was charged, the yet more strange relations between her and the man who in the first instance was included in the accusation, together with the exceptional circumstances of his acquittal and his immediate appearance in the witness-box, fully explain the great public interest which existed during the trial, and which culminated in the very remarkable scene which followed its conclusion. It was at my request that my friend, Mr. Edward Beal—from whom, as well as from Mr. Mead, I received during the case the most diligent and admirable assistance—has undertaken the duty, which he was specially qualified to perform, of preparing the volume for the press, and I am greatly obliged to him for the care which he has given to his task. Mr. Justice Wills has been good enough to revise the report of his summing-up, and Sir Charles Russell has kindly performed the same service in respect of his opening speech and reply. Mr. Sidney Plowman, of St. Thomas's Hospital, has supervised the medical references in the report, and thereby added to the obligation under which all concerned in the defence already stood for his assistance during the case. I trust that the volume may be found useful to all students of the administration of the law."

A. B. C.—Illustrated Lectures on Ambulance Work, by R. Lawton Roberts, M.D., published by Lewis, Gower-street, 1885.

THE "EXCELSIOR" PATENT COMBINATION GIG-PHAETON.

To the Editor of THE LANCET.

SIR,—Messrs. Clift and Sons, of Wellington, Salop, exhibited at the "Inventories" last year a pony carriage which could be converted at wish from a four-wheeler to a two-wheeler. The gold medal of the exhibition was awarded to them for this carriage as the most ingenious improvement in carriage-building that was exhibited. At my request they have adapted their invention to another class of vehicle—one which may be described as a gig-phaeton. The idea in my mind was to provide a carriage which should serve several different purposes needed especially by country doctors. In the winter, when roads are heavy, the prime requisite of an effective carriage for a country practitioner is easy draught. A two-wheeler, as compared with a four-wheeler, must always have the advantage in this respect, particularly in hilly districts. The great drawback of two-wheelers is the want of accommodation. This patent combination carriage makes a nice-looking, easily-worked gig for winter work, and an equally good-looking phaeton for summer weather, capable of bringing a friend and luggage from the railway station, or of accommodating four or five passengers in case of need for a picnic or dinner party. With hood and apron there is effective shelter in rainy weather. The four-wheeler has a full lock in turning, and the two-wheeler is balanced by means of a screw slide, and has therefore an easy motion. The distinctive advantages of the combination are (1) that the purchaser gets two carriages for the price of one—viz., from £52 without hood; (2) that one tax is paid for the two carriages; and (3) that only one coachhouse is needed for the two carriages. I do not know of any other carriage combining in one all these advantages.

I am, Sir, yours faithfully,

Southborough, Aug. 10th, 1886. E. PAGET THURSTAN, M.D.

A USEFUL PLANT.

DR. BRANDES, a Hanoverian physician, has recently demonstrated in a German contemporary the valuable properties of the anacharis alsinastrum, a water-plant which has hitherto been considered as an unmitigated nuisance, choking up rivers, and altogether useless. Dr. Brandes has remarked that in the district where he lives, and where malaria and diarrhœa yearly appeared in a sporadic or epidemic form, those diseases have gradually decreased since the anacharis alsinastrum began to infest the neighbouring rivers and marshes, and for four years have totally disappeared. He therefore proposes that the plant, which came originally from Canada, should be planted in marshy districts, with the view of checking malaria; and the experiment, in view of the evidence adduced in the article under notice, is certainly deserving of consideration.

Mr. Wm. Hedley had better study medicine at home first. The *Journal of the American Medical Association* is published in Chicago; the *Medical Record* in New York. Either of these journals might serve our correspondent's purpose.

Mr. Hawkins-Ambler.—Yes, in an early number.

THE MISSION TO DEEP SEA FISHERMEN.

THE useful work of the Mission to Deep Sea Fishermen is, we are glad to notice, receiving further recognition and support. An anonymous donor has recently contributed £2300 to cover the entire cost of building and equipping a seventh medical mission vessel to cruise with the North Sea trawling fleet. The medical and surgical work done on board these vessels is most important. The log of the vessel just arrived at Great Yarmouth after a two months' cruise with the Columbia fleet shows that no fewer than 200 cases have been treated in the dispensary during the voyage. One naturally asks what would these patients have done had there been no mission ship in the fleet. The more trivial cases would have had to endure until the return to port, whilst the serious ones would have been shipped off to London by the steam trawlers, which means being transferred in a small open boat from smack to steamer, and two days of suffering before the hospital can be reached. It is to be hoped that funds may be speedily forthcoming to enable the Mission to place a vessel with every fleet in the North Sea.

B. ought to make a claim if the executors show no sign of carrying out the wishes of A.

"THE OVERCROWDING OF THE PROFESSION."

To the Editor of THE LANCET.

SIR,—Your correspondent, "Felix Holt," very pertinently inquires in your issue of July 3rd, p. 43, "What may we expect the condition of the profession to be in half a century if some steps are not taken to prevent overcrowding?" I think I may say that this state of affairs is now under consideration in Canada—in the older province, at any rate—and those in authority are endeavouring to find a remedy for it. The principal steps to this end have been, so far, the raising of the standard of both matriculation and primary and final examinations, increasing the fees, and in the case of one university the term of study has been lengthened. The fact remains, nevertheless, that some schools in Canada, and many in the United States, are far too lenient as regards both the course of study and examinations. In this country there are but solitary cases of medical partnerships, and the assistant system is unknown. Consequently, every practitioner has to make a practice for himself. In reply to the concluding inquiry in your correspondent's letter, I may state that a degree from a British university gives the same privilege as the licence of the Royal Colleges. A person not holding some such qualification would have to pass an examination in Ontario or Quebec only if he intends to practise in those provinces.

I am, Sir, yours faithfully,

Montreal, July 16th, 1886. L.C.P.S. QUE.

"THE METROPOLITAN DISPENSARY," COMMERCIAL-ROAD.

A CORRESPONDENT sends us one of the cards of this dispensary, distributed promiscuously among the patients of other practitioners and dispensaries, with the signature of the resident physician. Our correspondent expresses his strong disapproval of such a system as an advertising one; and we agree with him.

G. L.—No vaccination certificates from Ireland are accepted in England in place of English certificates. The only places outside England where certificates can be obtained are Edinburgh and Glasgow, and there the vaccination stations are under special inspection.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—As a commentary upon the cases lately reported under this heading, will you permit me to ask the question, Is circumcision (for congenital phimosis) a justifiable operation? We know that fatal results have followed this procedure; and besides the risk, however small that may be, the parents, when not of the Hebrew persuasion, usually dislike the idea of their child "being made into a little Jew."

In the case of my own little boy and of several others, I have, under ether, introduced under the prepuce the closed blades of a pair of dressing forceps, and have then widely separated these. It is surprising how easily the prepuce can then be retracted behind the glans, which must be thoroughly exposed and cleaned. For a few days the foreskin must be drawn back. If thoroughly loosened on the first occasion there will be no difficulty whatever. Probably all this could be efficiently done under cocaine. At any rate, the success of the little manœuvre makes me urge its substitution for the cutting operation.

I am, Sir, yours faithfully,

Norfolk-terrace, W., Aug. 3rd, 1886. HERBERT SNOW.

COLOUR-BLINDNESS.

DR. WORMS, having examined 11,175 persons in respect of colour-blindness, has communicated his results to the French Academy of Medicine. Of the above number he found two only incapable of distinguishing one colour from another, three were blind for red and six for green, eighteen could not distinguish green from red, fifteen saw no difference between green and blue or grey, and fifty-two had a peculiar weakness in colour vision in general.

Mr. William Habgood.—Only graduates of universities are entitled to the prefix.

HEIGHT AND WEIGHT.

DR. BROCA, the eminent French anthropologist, is the author of a formula relative to the height and weight of the human body. It is that the body should weigh as many kilogrammes as it measures in centimetres, after deduction of the first metre. Thus a man measuring one metre eighty centimetres should weigh eighty kilos. Should his weight be more or less, he is too stout or too thin. As men grow older they lose their weight, but as a compensation they diminish in height also.

Justitia.—The insertion of the letter would probably lead to a discussion of a painful nature without corresponding benefit. Moreover, the matter is scarcely within our province.

"LEAD IN TINNED PROVISIONS."

To the Editor of THE LANCET.

SIR,—I notice in your valued journal the remarks of Dr. Rabcherski of St. Petersburg as to lead poisoning in connexion with preserved provisions. I am taking the liberty of sending you a tin invented by me during the last two years for the purpose of overcoming the difficulties spoken of by your correspondent. It is struck out of solid tin plate, and reduces to a minimum the danger of lead and other poisoning. In the first place, only tin plates of the very best quality can be used—that is, plates coated with pure block tin. The use of inferior plates coated with lead would result in too large a percentage of burst tins in the process of manufacture, as the strain is very great; therefore firms who prepare cheap goods cannot avail themselves of this method. To such perfection has this machine been brought that it strikes out 10,000 tins per day, with an average of not more than three damaged ones. The meat (or other contents) rests on the part of the tin struck out, and the top is soldered externally with solder composed of seventy parts of pure block tin and thirty parts of lead. This mixture is used for the sake of purity, also because it accelerates the work, which is of importance, as the quicker the preserving process is accomplished the better the results.

Trusting you will give place for these remarks in your columns,

I am, Sir, your obedient servant,

Leadenhall-street, E.C., Aug. 7th, 1886. J. MOIR CLARK.

"SUICIDE FROM DYSPEPSIA."

IN an annotation last week headed as above, we asked if the sufferer from dyspepsia in the case referred to had been under treatment of any kind. Mr. Rouse, the husband of the deceased, in a letter to us, replies that "she was, and had been for years, and was visited only the morning before the sad event by her medical attendant."

An Enquirer (Cleckheaton).—The suggestion is not new. The connexion between cause and effect, supposing such to exist in the matter referred to, is not very clear.

A CENTENARIAN.

To the Editor of THE LANCET.

SIR,—The following case of longevity may interest some of your readers.

Joseph Gathercole died at the Thingoe Union last week at the advanced age of 104 years and eight months. The accuracy of this age may be ascertained from the fact that he has been, on and off, an inmate of the union since it was built in 1836, and that at the time of his admission he was supposed to be about fifty-five years of age. Up to a few months of his death he was hale and hearty, and able to get downstairs and walk about.—I am, Sir, yours truly,

CHARLES SCOTT KILNER, M.B.,
Medical Officer of the Thingoe Union Workhouse.

Bury St. Edmunds.

DEAF-MUTISM IN SPAIN.

ACCORDING to Señor Don J. Lopez Navalon, principal of the National College for Deaf-mutes in Madrid, the number of persons afflicted with deaf-mutism in Spain is more than 10,000. For these there are, besides the Madrid College, which is supported by the State, only four other institutions in the provinces, and these are all supported and managed by private enterprise.

William Penn.—The question is entirely subject to the action of the General Medical Council in the matter of the recognition of forei degrees.

CANCER OF RECTUM; COLOTOMY.

To the Editor of THE LANCET.

SIR,—I have a patient upon whom I performed colotomy a fortnight ago whose case is interesting from two points. In the first place, she is only twenty-three years of age, and has such extensive cancer of the rectum as to have suffered complete obstruction of the bowels for three weeks. Secondly, the mode of death promises to be unusual. She was progressing rapidly towards recovery when, on the twelfth day after the operation, violent hæmorrhage came on, and has recurred to an alarming extent from time to time since. This bleeding evidently comes from the lower part of the bowel and from the cancerous mass itself, and will probably be the immediate cause of death.

I am, Sir, yours faithfully,

JOHN ALCOCK,
Surgeon, North Staffs. Infirmary.

Burslem, Aug. 9th, 1886.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Andrew Clark, London; Dr. Unna, Hamburg; Dr. Jose P. Rego Filho, Buenos Ayres; Dr. Herbert Snow, London; Dr. Rüdinger, Vienna; Dr. F. Kammerer, Berlin; Mr. V. Horsley, London; Mr. Reginald Harrison, Liverpool; Dr. R. D'O. Stephenson, London; Mr. Bruce Douglas, Lucerne; Mr. G. Padley, Swansea; Mr. G. H. Browne, Brynmawr; Mr. J. M. Clark, London; Messrs. Duncan, Flockhart, and Co., Edinburgh; Mr. W. Young, London; Mr. Grattan, Cork; Mr. J. Alcock, Bursiem; Mr. J. W. Wood, Liverpool; Messrs. Merritt and Hatcher, London; Mr. Nicholson, Hull; Mr. Kay, Pitworth; Mr. J. Hickman, Burmah; Mr. Rivington, London; General Maxwell, London; Mr. A. Neve, Kashmir; Mr. Hareton, Shirley; Dr. Chetti, London; Mr. W. McLaurin, London; Mr. Gurner, London; Mr. Hoar, Maidstone; Mr. St. Dalmas, Leicester; Messrs. Legos, Smith, and Co., London; Mr. Blake, Dublin; Dr. Ullan, Lima; Dr. Michell, New York; Dr. Redwood, Queensland; Dr. Wise, Maloja; Messrs. Hook and Co., Snodland; Miss Saunders, Tunbridge; Messrs. Hopkinson and Co., Nottingham; Dr. Hoysted, Gibraltar; Dr. Duggan, Castle Eden; Mr. Leeson, Brighton; Mr. Delanny, Shenley; Messrs. Lee and Martin, Birmingham; Miss Sergeant, Dudley; Mr. Keeley, Nottingham; Dr. Burgess, Manchester; Messrs. Mottershead and Co., Manchester; Mr. Mitchell, Transvaal; Dr. Cameron, Aberdeen; Mr. Gibson, Bromley; Mr. Cooke, Liskeard; Mr. C. S. Kilner, Bury St. Edmunds; Mr. Clark, Edinburgh; Mr. Roband, Richmond; Dr. J. Gairdner, Crieff; Mr. Vincent Jackson, Wolverhampton; Mr. Eales, Torquay; Mr. W. Fowler, London; Mr. Askey; Mr. H. G. Brooke, Manchester; Dr. J. F. Allen, Pietermaritzburg; Mr. R. Jones, Liverpool; Mr. M. D. Walker, Dundee; Mr. Morrison, Luton; Mr. W. Habgood, London; Mr. W. Lees, Chester; Mr. C. J. Smith; Mrs. J. Taylor; Mr. Crowdy, Chertsey; Mr. Huxley, London; Mr. Birchall, Liverpool; Mr. Brown, Houghton-le-Spring; Messrs. Robertson and Scott, Edinburgh; Mr. Hughes, Birmingham; Dr. Clapham, Rotherham; Mr. Shearman, Pendleton; Mr. Paterson, Leeds; Mr. Scott, Manchester; Mr. Fowler, Hereford; Dr. Symons, Oxford; Dr. Richardson, London; Thirty; J. H. O.; Justitia; Matron, Moorfields; R. S. B., Upton; Dr. B. F.; Guardian; Alpha, Wandsworth; Doctor; Student, Glasgow; W. C. S., Worthing; A. B., London; Sanitas; South Africa.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Nairn, Ferrybridge; Mr. Horsfall, Leeds; Mr. Anderson; Mr. Crookshank, Brighton; Mr. Newcomb, Ancoats; Mr. Boys, Pill; Mr. Robertson, Mexborough; Mr. Bridger, Hampstead; Mr. Bennington, Stockton-on-Tees; Dr. Jones, Treherbert; Mr. Cressy, Winslow; Mr. Aveling, Paddington; Mr. Hughes, Hansworth; Dr. McIntre; Dr. Williams, Shrewsbury; Dr. Harley, London; Mrs. Ernst, London; Mr. Jones, Llandovery; Mr. Horsley, Crail; Mr. Grace, Bristol; Messrs. Lee and Nightingale, London; Dr. Duckworth, London; Messrs. Oliver and Boyd, Edinburgh; Mr. Banks, Cheltenham; Messrs. Roberts and Co., London; Dr. Brecknell, Beaconsfield; Messrs. Abershon and Sons, St. Leonards; Mr. Partington, Tunstall; Messrs. Giles and Co., Bristol; Dr. Hanly, Leicester; Mr. Roberts, Kilmuir; Mr. Fry, Swindon; Mr. Birley, Manchester; Mr. Brown, Barlow; Dr. Pinder, Camberwell; Dr. Buchan, Plymouth; Mr. Dawe, Taunton; Mr. Dale, Harrow; Mr. Pentland, Edinburgh; Dr. Whiteside, Shap; Mr. Brown, Westgate-on-Sea; Mr. Cheesebrough, Bainton; Messrs. Robbins and Co., London; Mr. Marquis, Dundee; Mr. Arthur, Walsall; Mr. Lewis, Wingham; Mr. Malins, Dublin; Mr. Lloyd, Barmouth; Mr. Harris, Birmingham; Dr. Eberle, Thirsk; Mr. East, London; Mr. Blair, Upton Park; Mr. Richardson, Leicester; Mr. Kitchen, Ipswich; Mr. Cooke, Washington; Dr. Ems, Eastbourne; Mr. Rideal, London; Mr. Hall, Beverley; Mr. Phillips, Wandsworth; Messrs. Oppenheimer, London; Dr. Hughes, Nottingham; Mr. Cocoran, Loughboro'; Dr. Morgan, Treherbert; Secretary, Manchester; M. L.; M.R.C.S., Grantham; L. M. N.; Surrey, Birmingham; Substitute; General Apothecaries' Co., London; Medicus, Runcorn; P. D. P.; H.; Norman; C. B., Whitechapel; B. C.; A. B. C.; Reliable; R., Cheltenham; M.R.C.S., Barrow-in-Furness; M.R.C.S., Hastings; Medico-Chirurgius; Lady Superintendent, Cannock; M.D., Swanage; A. B., Barnley; Alpha, Hinckley; Y. S.; N. B., Leicester.

Liverpool Courier, Advocate of India, Liverpool Echo, Charity Record, Sussex Express, Leeds Evening Express, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, August 17.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, August 18.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—4 P.M. Prof. Dreschfeld: Diabetic Coma (Bradshawe Lecture).

Thursday, August 19.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M

Friday, August 20.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, August 21.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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